Juvenile Atlantic salmon (*Salmo salar L.*) surveys in the Miramichi River, New Brunswick, 1970-2004

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January 2007

Canadian Data Report of Fisheries and Aquatic Sciences 1188

2008-03569/

Canadian Data Report of

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Cat. No. Fs 97-13/2415E ISSN 0706-6465

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Correct citation for this publication:

Moore, D. and G. Chaput. 2007. Juvenile Atlantic salmon (*Salmo salar*) surveys in the Miramichi River Watershed from 1970-2004. Can. Data. Rep. Fish. Aquat. Sci. No. 1188. 117p.

CONTENTS

LIST OF TABLES iv

LIST OF FIGURES..v

ABSTRACT/RESUME...vi

INTRODUCTION...1

MATERIALS AND METHODS 1-5

DATA SUMMARY 5-6

ACKNOWLEDGEMENTS 6

REFERENCES..7

LIST OF TABLES

Table 1. Sub-watershed and corresponding site numbers. 8

Table 2. Site numbers, location descriptions, latitudes, and longitudes 9-12

Table 3. Site characteristics (elevation, stream order, habitat type, bottom type, conductivity and maximum depth 13-18

Table 4. Number of sites sampled by sub-watershed and within the main branches of the Miramichi River, 1970-2004. 19

LIST OF FIGURES

Figure 1. Miramichi River watershed and survey sites 20

Figure 2. Survey sites on the main stem Northwest Miramichi River and small tributaries (Northwest Miramichi watershed). 21

Figure 3. Survey sites on the Little Southwest Miramichi River basin (Northwest Miramichi watershed). 22

Figure 4. Survey Sites on the Northwest Millstream basin (Northwest Miramichi watershed) 23

Figure 5. Survey sites on the Sevogle River basin (Northwest Miramichi watershed) 24

Figure 6. Survey sites on the Tomogonops River basin (Northwest Miramichi watershed) 25

Figure 7. Survey sites on the main stem Southwest Miramichi River and small tributaries downstream from Boiestown (Southwest Miramichi watershed) 26

Figure 8. Survey sites on the main stem Southwest Miramichi River and small tributaries upstream from Boiestown (Southwest Miramichi watershed) 27

Figure 9. Survey sites on the Bartholomew River basin (Southwest Miramichi watershed) 28

Figure 10. Survey sites on the Cains River basin (Southwest Miramichi watershed) 29

Figure 11. Survey sites on the Dungarvon River basin (Southwest Miramichi watershed) 30

Figure 12. Survey sites on the Renous River basin (Southwest Miramichi watershed) 31

Figure 13. Survey sites on the Taxis River basin (Southwest Miramichi watershed) 32

Figure 14. Average density (fish per 100 m^2) of fry and the coefficient of variation (CV) by year of sampling from the Northwest Miramichi River (upper) and Southwest Miramichi River (lower) standard sites, 1970 to 2004. 33

Figure 15. Average density (fish per 100 m^2) of age 1+ parr and the coefficient of variation (CV) by year of sampling from the Northwest Miramichi River (upper) and Southwest Miramichi River (lower) standard sites, 1970 to 2004. 34

Figure 16. Average density (fish per 100 m^2) of age 2+ parr and the coefficient of variation (CV) by year of sampling from the Northwest Miramichi River (upper) and Southwest Miramichi River (lower) standard sites, 1970 to 2004. 35

Figure 17. Average Percent Habitat Saturation (PHS) and the coefficient of variation (CV) by year of sampling from the Northwest Miramichi River (upper) and Southwest Miramichi River (lower) standard sites, 1970 to 2004. 36

Figure 18. Average biomass (grams of fish per 100 m²) and the coefficient of variation (CV) by year of sampling from the Northwest Miramichi River (upper) and Southwest Miramichi River (lower) standard sites, 1970 to 2004. 37

Figure 19. Average fork length (cm) by sampling date of fry from the Northwest Miramichi main stem and tributaries (upper) and from the Southwest Miramichi main stem and tributaries (lower) for the time series 1970 to 2004. 38

Figure 20. Average fork length (cm) by sampling date of age 1+ parr from the Northwest Miramichi main stem and tributaries (upper) and from the Southwest Miramichi main stem and tributaries (lower) for the time series 1970 to 2004. 39

Figure 21. Average fork length (cm) by sampling date of age 2+ parr from the Northwest Miramichi main stem and tributaries (upper) and from the Southwest Miramichi main stem and tributaries (lower) for the time series 1970 to 2004. 40

APPENDICES

Appendix 1. Atlantic salmon density estimates and 95% confidence intervals for 1970-2004 41-72

Appendix 2. Atlantic salmon mean length (cm), mean weight (g), Percent Habitat Saturation (PHS), and biomass (g per 100 m^2) by site and year sampled for 1970-2004....................................73-117

Abstract

This report summarizes the densities, biological characteristics, biomass, and percent habitat saturation (PHS) of Atlantic Salmon (Salmo salar) juveniles from surveys in the Miramichi River watershed between 1970 and 2004. These data are from an ongoing program established to monitor changes in the relative abundance of juvenile salmon and other species in the Miramichi Watershed.

Résumé

Le présent rapport fait la synthèse des données recueillies sur les densités, les caractéristiques biologiques, la biomasse et l'habitat occupé par le saumon, en pourcentage (PHS), des jeunes saumons atlantiques (*Salmo salar*) dans le cadre de relevés effectués dans le bassin hydrographique de la rivière Miramichi entre 1970 et 2004. Ces données font partie d'un programme de surveillance des changements dans l'abondance relative de saumoneaux et d'autres espèces qui fréquentent le bassin hydrographique de la Miramichi.

INTRODUCTION

The Miramichi River has a drainage area of 14,000 km^2 and has been estimated to contain 55 million m^2 of juvenile salmon rearing habitat. The Miramichi River is formed within tidal waters by the confluence of the Northwest Miramichi and the Southwest Miramichi rivers (Fig. 1). The watershed area of the Southwest Miramichi is approximately twice as large as for the Northwest Miramichi. The average annual discharge of the Miramichi is 290 m^{3}s^{-1} with a maximum elevation of 470 m and an average gradient of 2.3 m km^{-1} (Randall et al. 1989). It is considered to have the largest run of Atlantic salmon in eastern Canada.

This report presents the results of surveys for juvenile Atlantic salmon (*Salmo salar* L.) conducted in the Northwest Miramichi River and Southwest Miramichi River watersheds from 1970 to 2004. The surveys were conducted annually to assess the relative abundance of wild juvenile salmon. The results of these surveys for some years have been presented previously to address specific questions related to Atlantic salmon abundance (Locke et al. 1993), carrying capacity (Chadwick and Randall 1989; Randall and Chadwick 1986), and impacts resulting from climate change (Swansburg et al. 2002).

Summaries presented in this report include site locations and physical descriptions, estimated densities of juvenile salmon by age group, site and sampling period, mean length and weight by site and sampling period by age group, and estimates of overall abundance based on biomass and an index of habitat saturation. The summarized data presented in this report are available from the New Brunswick Aquatic Resources Data Warehouse (Canadian Rivers Institute University of New Brunswick, Fredericton, New Brunswick; http://nbwaters.unb.ca). Also collected during these surveys but not summarized in this data report are catches of other species. The raw data files for this time series are archived in an Oracle database at the Gulf Fisheries Centre, Fisheries and Oceans Canada, Moncton, NB.

The data archived in these databases and summarized in this report represent an investment of 28 years of field personnel time and 3 years of data entry, editing and archiving over the 35 year time period. It is unmatched in terms of Atlantic salmon juvenile surveys of any data set which we know of in the world.

MATERIALS AND METHODS

Areas surveyed

Sites sampled within the Miramichi watershed are organized into 12 sub-watersheds (Table 1). A total of 181 different sites have been surveyed over the period 1970 to 2004 (Fig. 1 to 13). The selection of the sites to be sampled has been based on accessibility while attempting to distribute sites over the entire watershed. Geographic coordinates of the sites (latitude and longitude), elevation, and a brief description of the locations are given for each site in Table 2. In several cases where the open site CPUE technique was used and no salmon were captured, a second site was surveyed adjacent to the initial site to verify that juvenile salmon were in fact not present in the area. These extra adjacent sites are those which have decimal 0.1 appearing in their site number.

Detailed descriptions of habitat type and substrate type are given for 129 sites which have been sampled between 1993 and 2004 (Table 3). These are presented as indicators of the types of areas surveyed, not as representative of these particular sites in all years. The changing nature of streambeds has meant that sites have been moved upstream or downstream short distances yearly in some cases.

Physical characteristics of the sites were described in terms of the proportion comprised of four habitat types and the proportion within the site of substrate groups as defined below. Both these descriptors were obtained by visual estimation.

Habitat type	Habitat type characteristic
Riffle	fast current, shallow depth (< 23 cm), turbulent usually broken flow
Run	fast current, depth > 23 cm, turbulent and sometimes broken flow
Flat	slow current, depth < 46 cm, smooth surface
Pool	slow current, depth > 46 cm, smooth surface

Substrate type	Substrate type definition
Fines	fine silt or clay
Sand	< 2 mm hard particles
Gravel	2 to 16 mm
Pebble	16 to 60 mm
Cobble	60 to 250 mm
Rocks	250 to 500 mm
Boulder	> 500 mm
Bedrock	

Due to its generally low gradient, most of the sites located on order 2 and 3 streams are often inaccessible to spawning salmon due to beaver dams preventing fish passage. The presence or absence of age 0+ parr (young of the year or fry) is often an indicator of whether the water was high enough at spawning time to breach these dams. In some instances, only age 1 and older parr are found in some sites indicating that spawning access is limited but that juveniles can redistribute upstream of the barriers.

Some sites surveyed are not accessible to spawning salmon. Data from these sites are included in this report but they are excluded from the calculations of the annual indices of abundance. The sites include:

Little Southwest Miramichi River

Site 102 Shore Camp Brook - 3 kilometers upstream from the confluence with the Little Southwest Miramichi River. This is a high gradient low volume order 2 stream. Parr can migrate into the area occasionally.

Site 144 Cave Brook is a headwater stream located in the Christmas Mountains which flows into North Pole Stream. There are impassable waterfalls downstream of this site making this site inaccessible to spawning salmon and upstream migrating wild parr.

Sevogle River

Site 152 North Branch of Mullin Stream downstream of the bridge on the road into the crown reserve fishing areas of the North Branch of the Little Southwest Miramichi River. There is a waterfall impassable to spawning salmon and upstream migrating wild parr downstream of this site.

Study specific tributaries sampled for juvenile salmon

Additional tributaries and supplementary surveys were conducted to monitor juvenile salmon abundance relative to pollution or enhancement studies. Data from these tributaries have been excluded from the annual index of abundance for the Miramichi. These supplementary surveys are described below.

Tomogonops River: Development of a copper-zinc deposit led to effluent being pumped into this tributary of the Northwest Miramichi River beginning in 1960. Juvenile salmon densities were affected at sites downstream of the effluent source (Elson 1974). Mining operations ceased in 1999 but sites within this watershed are expected to continue being affected for several decades due to surface runoff from roads constructed from mine tailings although by diminishing amounts of base metals (Dr Wayne Fairchild – DFO Pers Comm).

Bartholomew River: This tributary of the Southwest Miramichi River was obstructed by a dam and a poorly functioning fish pass from 1852 to 1976. The river was stocked with hatchery parr and smolts in various quantities from 1956 to 1990. Juvenile surveys were conducted from 1970 to 1990 to monitor the results of these enhancement activities. Post-1990, the Bartholomew River has not received extensive stocking and surveys from 1994 to 2004 are considered as surveys of wild juvenile salmon abundance.

Northwest Millstream: Also known as Millstream, this tidal area tributary of the Northwest Miramichi River was obstructed by a dam without a fish pass in 1947. The dam was originally built to supply water to a local pulp and paper mill but this water supply was replaced by a pipeline to the Southwest Miramichi River in the mid 1970's. The center spillway of the dam was opened in 1979 to allow spawners access above the dam and the stock was enhanced by hatchery fish introductions during the 1970's and 1980's. Juvenile surveys above the dam from 1994 to 2004 indicate that the areas upstream of the dam were inaccessible in most years. Final removal of the dam was completed in 2005.

Equipment

All sampling from 1970-2004 was carried out with pulsed (at 60 Hz) DC electrofishers. Shore based generators (average current of 0.47 amps and an average of 369 volts) were used from 1970 to 1974. From 1975 to 1982 battery powered backpack electrofishing equipment was introduced at some of the sites (average current of 0.28 amperes and an average of 307 volts). Since 1983 all sampling has been carried out using backpack electrofishers (Smith Root Type 11 and Type 12B) with an average current of 0.13 amperes and 536 volts. Barrier nets, dip nets, and seines were fabricated from 5 mm Ace netting (11 kg test).

Sampling of catches

Fork lengths (to the nearest 0.1 cm) and whole wet weights (nearest 0.1 g) were determined after lightly anaesthetizing the fish with MS-222 (1970 to 1992), sodium bicarbonate salts (i.e. carbon dioxide in 1993 to 2003), or clove oil (2004). In some years, scale samples were collected from 3 fish per 10 mm size group and ages were assigned to the fish accordingly. At sites where scale samples were not collected, juvenile salmon were assigned to age groups based on length frequency data at each site and determining appropriate length ranges for fry, age-1 parr, and age 2 and older parr.

Removal or Depletion Method Estimates (Zippin 1956)

All removal method estimates were carried out at closed or barriered sites to prevent emigration or immigration of fish during sampling. The barrier nets were constructed of 5 mm "Ace @" knotless nylon netting, a size sufficient to retain all ages of juvenile salmon. Barrier nets measured 30 to 45 m in length, 1.2 m high, and each had a 35 cm burlap strip sewn along the bottom on which rocks could be placed to prevent fish escapement. Barrier nets were installed at the upstream and downstream extremities of each site (2 sided sites). In large river sites, where sampling was restricted to one side of the river, barriers were installed on 3 sides. The area of a closed site was calculated as the average width of the site (measured at 3 places: lower barrier, middle of site, and upper barrier) times the average length of the site (measured on each bank).

Electrofishing crews consisted of 3 or 4 members, one operating the electrofisher, one or two holding the collection seine, and one collecting fish with a dip net and bucket. The site was fished across the river from bank to bank moving downstream. Where stream velocity was sufficient shocked fish generally drifted downstream into the collection seine where they were removed with the dip net and transferred to a collecting bucket. In lower velocity areas fish were also collected by dipnetting directly from the site. Each sweep was concluded by removing all fish found along the lower barrier net. On completion of a sweep fish were sampled, counted, then released downstream of the site. After waiting a minimum of 30 minutes between sweeps, the area was swept again using the same procedure. In total the area would be swept 3 to 5 times and crews would attempt to remove all fish in the enclosed area during each sweep.

A population estimate for the area enclosed by the barrier nets was obtained following the method described by Zippin (1956) coded in FORTRAN (POPDN, written by J. Wright, DFO). Population estimates were obtained separately for fry (age-0 parr) and parr (age-1, age-2+, or parr ages 1 and 2+ combined). Where the successive catches in the sweeps or the total catch of parr was low, population estimates for parr were obtained for size groups combined and then separated into age-1 parr and age-2+ parr based on the proportion of the age groups in the total catch.

Densities are presented as the population estimate (number of fish) divided by the area (per 100 m^2) of the sampled site.

In special circumstances where the number of fish was near zero, or catches did not consistently decline, the removal method was unable to produce a population estimate. In these cases a point estimate, which was the total of the successive catches, was used to calculate density. Variance and 95% C.I. are reported as "not available" (n.a.).

In supplemental surveys on the Tomogonops River (1973-82), Bartholomew River (1970-90), Little Southwest Miramichi (1982), and Northwest Millstream (1970-83) the density estimates are reported without a standard deviation or 95% C.I. This was because the original data were not available for re-analysis.

CPUE Method Estimates

Extended juvenile surveys were conducted from 1993 to 2004 using a single sweep sampling method. Normally the sites were those sampled in previous years with the closed site method but where these sites were no longer accessible new site locations were used. The area to be surveyed was not closed off with barrier nets. Electrofishing crews consisted of 3 members, one operating the backpack electrofisher, a second holding the collection seine, and a third collecting fish with a dip net and bucket. The site was fished across the river from bank to bank moving upstream. Where stream velocity was sufficient shocked fish generally drifted downstream into the collection seine where they were removed with the dip net and transferred to a collecting bucket. In lower velocity areas fish were also collected by dipnetting directly from the site. Effort was recorded as the total seconds of "on" time for the electrofisher unit. The procedure was continued until approximately 500 seconds of on time had elapsed and the crew had arrived at the river bank. Calibration experiments had determined that this amount of time was required to cover an area of approximately 200 m^2 (Chaput et al 2005).

The data to model the conversion of CPUE catch to density were collected by initially sampling using the CPUE approach within a closed site followed by a standard successive removal sampling. Procedures for selecting the best model to predict density from CPUE have been described separately based on 200 calibration sites (Chaput et al 2005). The best model selected from this process was used to predict densities for 1993 to 2004 (Chaput et al. 2005). The confidence intervals for these estimates are based on the uncertainty of a single predicted value from the regression.

Percent Habitat Saturation and Biomass

Two alternate measures of abundance are presented: Percent Habitat Saturation (PHS) and biomass. Each of these measures allows all age classes to be combined in one value expressing overall abundance of juvenile salmon. PHS was determined for Atlantic salmon using the methodology described by Grant and Kramer (1990). It is an index of the amount of habitat occupied and is calculated using an association between fish length and territory size of juvenile salmon and density of fish. Biomass, in terms of g per 100 m², was calculated as the sum of the age specific products of mean weight at age and density at age. Mean weight at age was calculated from individual fish weight collected during 1999 to 2004. For the previous years, 1970 to 1998, the mean weight at age was estimated from the mean length at age and a length weight relationship developed using the 1999 to 2004 data.

DATA SUMMARY

During 1970 to 2004, a total of 2022 sites were surveyed, 688 using the open site CPUE method and 1334 with the closed site removal method. The sites were located in stream order 2 to 7 with the majority of the sampling from stream order 3 and 4 tributaries. In terms of wetted area of river, the Miramichi is composed primarily of stream order 4 to 6.

Stream order	Wetted area proportion[1]	Proportion of sites
1	<0.01	0
2	0.04	0.08
3	0.12	0.32
4	0.27	0.33
5	0.23	0.15
6	0.27	0.11
7	0.06	0.01

[1] Wetted area proportions from Amiro (1983)

Elevations of the sites ranged between 5 m and 434 m with an average elevation of 139 m.

The dominant habitat types in the sites, representing 89% of the total area, was riffle and run habitat, areas which are considered most suitable for juvenile salmon (Table 3). The most common substrate groups in the sampled sites were cobble, pebble, rock, and gravel representing on average 86% of the substrate type (Table 3).

The surveys were conducted between 22 June to 21 October in the Northwest Miramichi and to 4 November in the Southwest Miramichi. The mean date of sampling over the 35 year time series was 17 to 18 August for the Northwest and Southwest Miramichi rivers, respectively.

Sampling effort varied annually with the least intensive sampling between 1985 and 1992 (Table 4). Only three sites were sampled in 1991 whereas 95 sites were sampled in 1977 and 1978. More sites were sampled in the Southwest Miramichi than in the Northwest Miramichi, with the proportion approximately equal to the relative sizes of the two rivers in the earlier portion of the time series. Proportionally (in terms of watershed area) more sites have been sampled from the Northwest Miramichi since 1994.

The estimated densities of fry in the Northwest Miramichi increased from an average of 18 fish per 100 m² during 1970 to 1984 to an average of 62 fish per 100 m² since 1985 (Fig. 14; Appendix 1). The variability among sites, described by the coefficient of variation, has decreased over time, which indicates that the variation in densities among sites has declined as the abundance increased. Similar large increases in average fry densities were observed in the Southwest Miramichi; 26 fish per 100 m² in 1970 to 1984 compared with 92 fish per 100 m² in 1985 to 2004 (Fig. 14; Appendix 1).

Age-1 parr densities have also increased over the time period surveyed. Densities during 1986 to 2004 averaged 24 fish per 100 m² in both the Northwest and Southwest Miramichi compared to 12 and 7 fish per 100 m² in the Northwest and Southwest Miramichi, respectively, before 1985 (Fig. 15; Appendix 1). Inter-site variability has decreased as densities increased in both rivers.

Age-2+ parr densities are higher in the Northwest Miramichi than in the Southwest Miramichi but the increase over time has been much less than for the younger age groups (Fig. 16; Appendix 1). Average densities of age-2+ parr are higher in the Northwest than in the Southwest and inter-site variability has decreased slightly over the time series.

The PHS index has risen dramatically post-1992 in both main branches and the average PHS value has been about 30 since 1997 in the Northwest Miramichi and since 1994 in the Southwest Miramichi (Fig. 17; Appendix 2). Grant and Kramer (1990) suggested that density dependent effects (such as emigration, reduced growth, reduced survival) are likely to occur at PHS index values of 27 or above.

The trends in biomass values mirror the trend in the PHS index values with biomass in excess of 400 g per 100 m² on average in both branches of the Miramichi (Fig. 18; Appendix 2). These standing stock biomass values are for Atlantic salmon only, all age groups. As with densities, the inter-site variability in both PHS and biomass has declined as the indices increased over the time period of observation (Fig. 17, 18).

The mean fork length of fry is strongly associated with the date of sampling in both the Northwest Miramichi and Southwest Miramichi rivers (Fig. 19). At first sampling, fry averaged about 3 cm fork length and by the end of the fall had achieved fork lengths of about 6 cm (Fig. 19). There are important differences in mean fork length at comparable sampling dates which reflects differences in growth conditions, primarily water temperatures. Age-1 parr fork length increases slightly over the period of sampling, from about 8 cm in late June to 9 cm by the fall with parr in the Southwest Miramichi being on average larger at fixed date than those from the Northwest Miramichi (Fig. 20). As with fry, there are important differences in mean size for the same date of sampling within the watershed. Age-2+ parr are in the 10 to 13 cm range with no association with date of sampling (Fig. 21). There are very important differences in mean fish size among sites.

ACKNOWLEDGEMENTS

The authors would like to thank others that contributed to the collection of the data and preparation of this report. Ward Coates, Emerson Schofield, and Russell Pickard (all retired DFO employees) lead the field survey crews from 1970 to 1992. The Eel Ground First, Northumberland Salmon Protection Association, and Miramichi Salmon Association have all partnered with DFO to deliver the juvenile survey program from 1993 to 2004. John Hayward and Joe Sheasgreen (DFO Oceans and Science) lead survey crews in the recent time period. Brad Firth (DFO Oceans and Science, Gulf Region) assisted in the preparation of the figures.

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Table 1. Sub-watershed and corresponding site numbers.

Sub-watershed	River key	Sites
Northwest Miramichi		
Northwest Millstream	NW Millstream	134, 135, 157, 158, 159, 160, 161, 162, 163
Northwest Miramichi main stem and small tributaries	NW Miramichi	18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 40, 41, 42, 109, 113, 115, 143, 153, 191, 201, 215, 216
Sevogle	Sevogle	37, 38, 39, 103, 104, 107, 108, 111, 112, 112.1, 152, 153, 190, 208
Tomogonops	Tomogonops	113, 114, 148, 149, 151
Little Southwest Miramichi	LSW Miramichi	43, 44, 45, 46, 100, 101, 102, 103, 105, 106, 106.1, 107, 107.1, 144, 145, 146, 147, 205, 208
Southwest Miramichi		
Barnaby	Barnaby	97, 98, 131
Renous	Renous	47, 48, 49, 50, 51, 52, 53, 54, 116, 156, 199, 209, 214
Dungarvon	Dungarvon	54, 55, 56, 57, 58, 117, 123, 186, 188, 210
Southwest Miramichi main stem and small tributaries	SW Miramichi	58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 79, 80, 81, 82, 83, 84, 85, 89, 90, 91, 92, 93, 94, 95, 96, 120, 121, 122, 124, 125, 126, 127, 128, 129, 130, 150, 200, 203, 204, 206
Bartholomew	Bartholomew	118, 119, 119.1, 136, 137, 138, 139, 140, 141, 142, 164, 165, 166, 167, 168
Cains	Cains	74, 75, 76, 77, 78, 110, 174, 178, 198, 202, 211, 212, 213
Taxis	Taxis	86, 87, 88, 192, 193, 194, 195, 196, 197

Table 2. Site numbers, location descriptions, latitudes, and longitudes of sites sampled.

Site	Location Description	Latitude	Longitude
18	Portage River near mouth above bridge at ford	47.217	65.810
19	Portage River upstream of bridge above Tozer Brook	47.270	65.800
20	Little River below bridge 1 km above mouth	47.190	65.910
21	Little River below ford about 1.4 km above mouth	47.200	65.913
22	Little River below bridge approx. 7.6 km above mouth	47.210	65.967
23	Sutherland Brook above bridge on route 420	46.938	65.821
24	Northwest Miramichi River above the mouth of Wildcat Brook	47.000	65.833
25	Northwest Miramichi River above mouth of Little Sevogle River	47.030	65.835
26	Northwest Miramichi River below the Curventon counting fence	47.055	65.832
27	Northwest Miramichi River above the mouth of Trout Brook	47.090	65.835
28	Northwest Miramichi River above the mouth of Pat's Brook	47.157	65.832
29	Northwest Miramichi River at Allison Farm south side of river	47.210	65.817
30	Northwest Miramichi River at Allison Farm north side of river	47.210	65.817
31	Northwest Miramichi River just below Elbow Pool	47.167	65.956
32	Northwest Miramichi River at Stony Brook Crown Reserve	47.169	65.995
33	Northwest Miramichi River at Camp Adams (former FRB Camp Site)	47.191	66.121
34	Northwest Miramichi River at Camp Crawford (former Warden Camp Site)	47.253	66.236
35	South Branch Northwest Miramichi River above bridge near mouth	47.272	66.321
36	Northwest Miramichi River at Little Bald Mountain campsite	47.301	65.351
37	Big Sevogle River 0.5 km above Stillwater Pool	47.075	65.865
38	North Branch Sevogle River above bridge on road by forestry camp	47.133	66.118
39	South Branch Sevogle River above bridge below North Branch South Sevogle	47.069	66.258
40	Little Sevogle River above bridge on Mullin Stream Rd.	47.042	65.889
41	Little Sevogle River approx. 1.6 km above McNeal Bk.	47.018	65.931
42	Little Sevogle River approx. 3.6 km above McNeal Bk.	47.001	65.960
43	LSW Miramichi River below bridge at Sillikers	46.937	65.908
44	LSW Miramichi River above mouth of Park's Bk.	46.896	66.147
45	LSW Miramichi River between Moose Landing and Smith Forks	46.961	66.560
46	Catamaran Bk. above bridge on Repap Rd.	46.856	66.192
47	Renous River above Crown Pt Bk.	46.823	65.973
48	Renous River above McGraw Bk.	46.822	66.110
49	South Branch Renous River above Monaghan Bk.	46.767	66.214
50	Renous River above the mouth of the Dungarvon River south side of river	46.817	65.907
51	Renous River above the mouth of the Dungarvon River north side of river	46.817	65.907
52	Renous River 3.2 km above Crown Pt Bk. at Gator Crossing	46.828	66.008
53	North Branch Renous River just above site # 54	46.797	66.201
54	North Branch Renous River above bridge on Rte 108	46.797	66.201
55	Dungarvon River above Russell and Swim Bridge	46.659	66.323
56	Dungarvon River below Dungarvon Lake Bk.	46.669	66.264
57	Dungarvon River below Furlong Bridge	46.744	66.015
58	Southwest Miramichi River about 0.4 km above Norrads Bridge (Bloomfield Ridge).	46.484	66.481
59	Southwest Miramichi River below the mouth of McBean Bk.	46.560	66.555
60	Southwest Miramichi River between Rocky Bend and Gilman Bk.	46.597	66.692
61	Southwest Miramichi River 1.6 km above Upper Blackville bridge	46.609	65.892
62	Southwest Miramichi River approx. 2 km below Porter Cove bridge	46.502	66.335
63	Southwest Miramichi River above footbridge in McNamee	46.510	66.285
64	Southwest Miramichi River above bridge in Upper Blackville	46.617	65.880
65	South Branch Southwest Miramichi River near Juniper	46.549	67.226
66	Southwest Miramichi River above the mouth of Burnthill Brook	46.575	66.818

Table 2. (cont'd) Site numbers, location descriptions, latitudes, and longitudes or sites sampled.

Site	Location Description	Latitude	Longitude
67	Southwest Miramichi River below River View Haven Camp (Blissfield - Upper Blackville area)	46.578	66.020
68	Southwest Miramichi River above the mouth of Bett's Mill Bk.	46.438	66.190
69	Southwest Miramichi River about 1.2 km below Biggar Bk.	46.511	67.113
70	Southwest Miramichi River below the mouth of Burnt Land Bk.	46.463	66.410
71	Southwest Miramichi River at Russell Rapids below bridge at Doaktown	46.558	66.117
72	Morse Brook above bridge on Howard Rd.	46.698	65.786
73	Morse Brook at Picnic Park area on route #8 downstream of culvert	46.668	65.849
74	Sabbies River (Cains River tributary) at ford 1km above the mouth	46.583	65.720
75	Cains River about 2.4 km below Shinnikburn	46.556	65.815
76	Cains River above the mouth of Six Mile Bk.	46.509	65.858
77	Cains River below the mouth of Leighton Bk.	46.405	66.110
78	Cains River below bridge on Grand Lake Rd.	46.435	66.018
79	Big Hole Bk. near mouth in the Meadow Bk. area	46.561	66.197
80	Big Hole Bk. below bridge on Crooked Bridge Bk. Rd.(to Russell and Swim Bridge)	46.557	66.272
81	Big Hole Bk. below culvert over N. Big Hole Bk.	46.593	66.319
82	Bett's Mill Bk. near mouth below covered bridge	46.539	66.187
83	Bett's Mill Bk. below forks of North and South branches	46.483	66.206
84	Burntland Bk. near mouth above route #8 bridge	46.461	66.408
85	Burntland Bk. 1.2 km below the mouth of Willow bk.	46.392	66.361
86	Taxis River below the mouth of Stewart Bk.	46.431	66.579
87	Taxis River above the mouth of Lower Hayden Bk.	46.453	66.727
88	Taxis River above the mouth of Upper Hayden Bk.	46.442	66.779
89	McBean Bk. at mouth	46.559	66.557
90	McBean Bk. below bridge approx. 3.6 km upstream from mouth	46.543	66.594
91	Rocky Brook at Young Dam	46.672	66.638
92	Rocky Bk. below the mouth of Hurd Bk.	46.689	66.636
93	Rocky Bk. approx. 0.8 km below Sprague Bk.	46.744	66.658
94	Rocky Bk. below bridge on Brown Lake Rd.	46.713	66.645
95	Teague Brook above bridge approx. 1 km from mouth	46.558	67.233
96	Teague Brook approx. 1 km above Little Teague Bk.	46.587	67.251
97	Barnaby River below old abutment for route #126 bridge	46.860	65.441
98	Barnaby River below bridge on West Collette Rd.	46.775	65.473
100	Little Southwest Miramichi River approx. 1.5 km above Devils Bk. (above Clellend's Pool - end of Halcomb Rd)	46.890	66.200
101	Little Southwest Miramichi River at Bluestone Lookout	46.888	66.084
102	Shore Camp Brook approx. 3 km from mouth (tributary of LSW Miramichi)	46.947	66.257
103	Mullin Stream tributary of South Branch Sevogle River above bridge on Mullin Stream Rd. at the top of the gorge	47.050	66.000
104	North Branch Sevogle river below bridge on road to Sheephouse Falls in Groundhog Landing	47.140	65.980
105	Little Southwest Miramichi River at Loggie Lodge by bridge on North Pole Stream Rd.	46.970	66.530
106	Northwest Branch Little Southwest Miramichi River in 1st riffle above bridge near Moccasin Lake	47.004	66.709
106.1	Northwest Branch Little Southwest Miramichi River above bridge near Moccasin Lake in immediately upstream 106.1	47.004	66.709
107	Tuadook River approx. 50m above bridge on Repap Rd. (downstream of Tuadock Lake)	46.970	66.630
107.1	Tuadock River upstream of bridge 100m above site 107.1	46.970	66.630
108	North Branch Sevogle River headwater area at bridge on Fraser Burchill Rd	47.210	66.330
109	Northwest Miramichi River downstream of old bridge site above DNRE barrier	47.280	66.330

Table 2. (cont'd) Site numbers, location descriptions, latitudes, and longitudes or sites sampled.

Site	Location Description	Latitude	Longitude
110	Muzroll Bk. below bridge at mouth	46.530	65.860
111	South Branch Sevogle River at Simpson's Landing	47.043	66.152
112	South Branch Sevogle River approx. 0.5 km above Sheephouse Bk. at the "Narrows" in riffle by bank	47.073	65.993
112.1	South Branch Sevogle River approx. 0.5 km above Sheephouse Bk. at the "Narrows" in run offshore of 112.1	47.073	65.993
113	Tomogonops River above bridge near mouth	47.230	65.840
114	North Branch Tomogonops River on upper side of old rail line from Heath Steel	47.282	65.960
115	Northwest Miramichi River at Miners Bridge	47.190	65.890
116	Renous River below Pineville bridge	46.810	65.870
117	Dungarvon River at M&M Whooper Lodge	46.780	65.970
118	Bartholomew River below footbridge near Davis Landing Bk.	46.631	66.153
119	Bartholomew River 1 km above Watson Bk. where road 1st meets river	46.720	65.870
120	South Branch Burnthill Brook approx. 5 km above N Branch Burnthill Bk.	46.680	66.970
121	Clearwater Brook below bridge on Irving forestry road to Deersdale	46.760	66.830
122	Rocky Brook upper site on Irving Forest Road above barrier to anadromous salmon migration	46.779	66.725
123	Dungarvon River - South Branch at bridge on Rte 108 approx. 3 km above the forks	46.830	66.667
124	Southwest Miramichi River at Dean Bar in front of camp	46.586	65.960
125	Porter Brook below the falls 200 m above the mouth	46.480	66.470
126	North Branch Southwest Miramichi River above DNRE barrier	46.570	67.160
127	South Branch Southwest Miramichi River above bridge in Juniper	46.548	67.202
128	Southwest Miramichi River above Deersdale bridge	46.499	67.050
129	McKiel Bk. above 1st bridge from mouth	46.550	66.040
130	South Branch Southwest Miramichi River below bridge at Foreston	46.529	67.308
131	Barnaby River above bridge on South Barnaby River Rd.	46.880	65.518
134	Northwest Millstream approx. 500 m above bridge near mouth	46.980	65.690
135	Northwest Millstream below bridge on Chapel Island Rd.	47.040	65.640
136	Bartholomew River upstream of Walsh Bk.	46.700	65.910
137	Bartholomew River - in Ledbetters Bk. approx. 2.4 km downstream from Fowler's Meadow Bk.	46.630	66.100
138	Bartholomew River - 2 km below forks of N and S branches	46.630	66.300
139	South Bartholomew River - downstream of bridge on Crooked Bridge Bk. Rd.	46.620	66.320
140	South Bartholomew River upstream 4.4 km from mouth	46.600	66.370
141	North Bartholomew River upstream of Crooked Bridge Bk. Rd.	46.630	66.330
142	Bartholomew River - in Otter Bk. approx. 2.4 km downstream of Weaver Siding Rd	46.650	65.960
143	Northwest Miramichi River at Crawford Stretch of Crown Reserve 1 km upstream of site 34	47.250	66.250
144	Cave Bk. tributary of North Pole Stream in Christmas Mountains (site above barrier to salmon migration)	47.133	66.670
145	LSW Miramichi-North Pole Brook at Ramsey Lodge	46.980	66.470
146	Lower North Branch Little Southwest-Adams Crown Reserve	47.009	66.400
147	Lower North Branch Little Southwest-Bridge Pool-Aescalapius Club	46.983	66.373
148	North Branch Tomogonops River at bridge on Hwy. 430	47.328	66.067
149	North Branch Tomogonops River at bridge on 1st road east off Rte 430 north of Heath Steel	47.310	66.030
150	Southwest Miramichi River above the mouth of the Bartholomew River	46.740	65.830
151	North Branch Tomogonops River approx. 1 km downstream of site 560 at end of logging rd.	47.305	66.015
152	North Branch Mullin Stream above bridge (site is inaccessible to anadromous salmon)	47.010	66.160
153	South Branch Sevogle-upper bridge at forks-100m upstream	47.090	66.320

Table 2. (cont'd) Site numbers, location descriptions, latitudes, and longitudes or sites sampled.

Site	Location Description	Latitude	Longitude
156	Little South Branch Renous River - in riffle below washed out bridge just above the mouth	46.710	66.360
157	Northwest Millstream - below dam approx. 3.2 km above the mouth of NW Millstream	46.990	65.670
158	Northwest Millstream - on Ox Brook just below bridge on the road to Bellefond	47.060	65.660
159	Northwest Millstream - below bridge on road between Telly Road Crossing and Bellefond	47.110	65.620
160	Northwest Millstream - below bridge on road in Bellefond	47.170	65.650
161	Northwest Millstream - 0.5 km above Cow Brook	47.050	65.660
162	Northwest Millstream - 1 km above bridge on Chapel Island Rd.	47.050	65.630
163	Northwest Millstream -1.6 km upstream from site 160	47.110	65.670
164	Bartholomew River - downstream of old splash dam below forks of North and South Bartholomew Rivers	46.620	66.320
165	Bartholomew River - 4 km below Ledbetter's Bk. - access through Weaver Siding	46.680	66.020
166	Bartholomew River - below dam in Blackville (2.4 km below Watson Bk.)	46.730	65.830
167	Bartholomew River - in Otter Brook approx. 0.5 km upstream of mouth where road fords the brook	46.700	65.890
168	Bartholomew River - above Ledbetters Bk. approx. 1.6 km	46.670	66.070
174	Cains River - Lower Otter Bk. below bridge approx. 2 km upstream from the mouth	46.370	66.250
178	Cains River - Leighton Brook from the mouth to 80m upstream	46.405	66.110
186	Dungarvon River - North Branch at Halfway Inn - below bridge on Hwy. # 108	46.820	66.650
188	Dungarvon River - above DNRE barrier at Frying Pan Pool	46.760	66.580
190	Sevogle River - downstream of Camp McTurk where driveway 1st meets river	47.065	65.852
191	Trout Brook below bridge on Chapel Island Road	46.116	65.773
192	Taxis River - 250 m above Clearwater Bk.	46.415	66.527
193	Taxis River - Below Clearwater Bk approx 300 meters	46.416	66.521
194	South Branch Taxis River - at Yellow Bridge	46.429	66.816
195	Taxis River - above Hwy 625 bridge	46.425	66.605
196	Taxis River below the mouth of Hovey Bk.	46.433	66.682
197	Taxis River - 500m upstream on Taxis River Rd from Hwy 625	46.449	66.461
198	Muzroll Brook downstream of the Grand Lake Rd - below north branch	46.484	66.061
199	Renous River above the Pineville bridge Bennie's Hill	46.808	65.876
200	Southwest Miramichi in Blackville just below the ford to Doctor's Island	46.734	65.824
201	Northwest Miramichi River at Bridge Pool (Crawford Stretch of Crown Reserve)	47.257	66.227
202	Cains River growth site upstream of Shinnickbum by Vaughan Anthony's camp (below Six Mile Bk	46.519	65.853
203	Southwest Miramichi River across from Pond's Chalet	46.488	66.361
204	Salmon Brook (below Rocky Brook) above bridge near mouth	46.556	65.544
205	LSW Miramichi-Little North Pole Stream - downstream of culvert on North Pole Rd.	46.984	66.518
206	Elliott Brook - 100m upstream of bridge near mouth	46.562	67.290
207	Guagus Stream - below culvert across from Guagus Lake	47.001	66.353
208	Clearwater Brook (South Br. Sevogle) downstream of bridge on Chester Mines Road	47.101	66.233
209	North Branch Renous River above bridge on Morran Lake Rd.	46.874	66.428
210	Dungarvon River above bridge located near the mouth of Bamford Bk. (57 km upstream of the mouth of the Dungarvon)	46.701	66.484
211	North Branch Cains River on Bantalor Rd. -site at log landing approx. 150 m upstream of bridge	46.337	66.324
212	Cains on Bantalor Rd. at bridge on road from Boiestown - site 26 m below center abutment of bridge	46.319	66.289
213	Cains River at Ferguson's (Wades) Camp 0.8 km from mouth of Cains	46.665	65.770
214	South Renous River at Red Rock above bridge at km 55.5	46.791	66.477
215	Northwest Miramichi River at Wayerton Bridge	47.135	65.837
216	Northwest Miramichi R. across from Geyer's Camp near the mouth of the Little Sevogle R.	47.030	65.835

Table 3. Site characteristics (elevation, stream order, habitat type, substrate type, conductivity, and maximum depth) for survey sites. Note that these are average values from sampling for the years 1993-2004.

	Elevation	Stream	[1] Habitat(%)				[2] Bottom Type (%)									Max
Site	(meters)	Order	Riffle	Run	Flat	Pool	fines	sand	gravel	pebble	cobble	rock	boulder	bedrock	Cond[3]	Depth (cm)
18	50	4	75	0	25	0	0	15	20	30	30	5	0	0		30
19	59	3														
20	105	3	47	38	10	5	1	3	11	17	40	20	5	5	83	47
21	113	3	60	30	10	1	0	5	10	10	50	20	5	0		49
22	162	3	48	40	11	1	1	2	8	17	44	26	2	0		46
23	5	2	60	38	3	0	0	8	28	38	23	5	0	0	67	44
24	5	6	60	37	3	0	0	7	28	38	22	5	0	0		
25	8	6														
26	13	5	36	25	29	10	0	2	8	7	9	4	1	68	45	51
27	18	5	10	40	50	0	0	3	8	15	30	30	14	0		65
28	35	5	100	0	0	0	0	0	75	20	0	5	0	0		25
29	47	5	40	60	0	0	0	3	6	15	45	28	3	0	57	53
30	47	5	45	54	1	0	0	3	16	24	43	12	2	0	57	44
31	112	4	54	35	11	0	0	4	13	24	36	21	3	0	38	38
32	135	4	40	60	0	0	0	0	13	15	28	33	13	0		45
33	253	4	33	64	1	1	0	3	19	17	30	22	5	4	36	44
34	303	4	38	59	2	1	0	2	14	19	31	26	8	0	39	53
35	329	3	49	48	1	3	1	4	14	19	38	24	2	0	42	45
36	351	3	50	25	0	25	5	5	10	40	40	0	0	0		
37	27	5	65	35	0	0	0	0	9	15	30	40	6	0		41
38	210	4	69	30	2	0	0	2	9	19	36	18	6	11	62	48
39	275	4	33	59	7	0	0	3	10	18	38	26	6	0	32	46
40	38	3	45	38	17	0	0	3	9	16	43	22	6	0	72	44
41	60	3	84	9	8	0	0	5	16	25	33	16	5	0		26
42	89	3														
43	13	5	21	40	23	17	0	8	15	29	35	12	2	0	37	56
44	88	5	18	78	3	0	0	2	7	16	36	35	5	0	35	54
45	327	4	48	44	8	0	0	5	12	31	37	13	2	0	34	50
46	158	2	53	12	34	1	1	6	13	24	37	16	2	0	81	40
47	27	5														
48	56	5	66	27	6	0	0	3	12	24	46	14	0	0	46	32

Table 3. (cont'd) Site characteristics (elevation, stream order, habitat type, substrate type, conductivity, and maximum depth) for survey sites.

	Elevation	Stream	[1] Habitat(%)				[2] Bottom Type (%)									Max
Site	(meters)	Order	Riffle	Run	Flat	Pool	fines	sand	gravel	pebble	cobble	rock	boulder	bedrock	Cond[3]	Depth (cm)
49	76	4														
50	18	5	5	95	0	0	0	10	40	40	10	0	0	0		47
51	18	5														
52	35	5	18	58	19	6	2	4	8	17	27	34	9	0	45	50
53	88	4														
54	88	4	40	52	8	0	0	2	6	22	38	26	7	0	32	41
55	145	4	66	31	3	0	0	5	14	21	43	15	2	0	42	35
56	115	4														
57	48	4	58	42	0	0	0	4	15	35	41	5	0	0	45	41
58	71	6	59	35	6	0	0	2	15	23	35	23	3	0	42	34
59	93	6														
60	145	6	31	44	25	0	0	4	11	17	34	23	11	0	39	49
61	17	6	67	30	3	0	0	9	18	42	30	2	0	0	44	31
62	43	6	51	47	2	0	0	3	12	30	43	12	1	0	43	46
63	40	6	55	40	5	0	0	4	15	32	48	2	1	0		35
64	17	6	50	47	2	2	0	7	20	40	26	7	1	0		48
65	255	4	38	40	21	2	0	7	17	40	30	5	0	0	44	41
66	180	5														
67	25	6														
68	34	6														
69	246	5	13	77	5	5	0	4	8	15	27	34	12	0	42	61
70	58	6														
71	30	6	70	20	10	0	0	13	30	45	13	0	0	0		48
72	18	3														
73	49	2														
74	34	5	53	35	11	1	0	5	10	20	44	19	3	1	70	38
75	27	6	24	47	22	8	0	8	22	34	29	7	0	0	45	55
76	38	5	33	38	30	0	0	15	20	25	30	8	3	0		55
77	77	5	38	29	33	0	0	1	6	8	15	7	1	62	32	40
78	57	5	51	34	15	0	1	8	17	26	37	9	2	0	36	40
79	45	4	58	38	4	0	2	7	15	26	37	12	2	0	51	32

Table 3. (cont'd) Site characteristics (elevation, stream order, habitat type, substrate type, conductivity, and maximum depth) for survey sites.

	Elevation	Stream	[1] Habitat(%)				[2] Bottom Type (%)									Max
Site	(meters)	Order	Riffle	Run	Flat	Pool	fines	sand	gravel	pebble	cobble	rock	boulder	bedrock	Cond[3]	Depth (cm)
80	95	2														
81	143	3														
82	36	3	47	37	16	0	3	5	15	27	37	10	3	0	44	39
83	101	3														
84	58	4	46	46	6	2	1	2	10	21	32	23	8	3	42	58
85	119	4														
86	105	4	48	19	34	0	0	4	7	14	31	32	11	0	47	37
87	167	4														
88	199	4	53	34	13	1	0	1	4	15	28	38	15	0	48	46
89	98	3														
90	177	3														
91	264	4	10	40	20	30	0	0	8	15	35	40	2	0		100
92	272	4	75	23	2	0	0	6	15	26	35	16	3	0	30	37
93	287	4														
94	278	4														
95	266	3	57	19	24	0	1	6	21	23	38	10	1	0	39	31
96	285	3														
97	26	4	15	36	30	19	0	6	13	14	39	28	1	0		63
98	46	3	77	11	12	0	1	3	11	19	34	29	3	0	163	30
100	109	5	26	68	6	0	0	1	13	15	28	36	8	0	36	67
101	55	5	0	100	0	0	0		10	20	35	25	10	0		50
102	255	2					40	30	10	0	20	0	0	0		40
103	126	4	72	24	5	0	0	1	6	19	41	27	5	1	34	43
104	137	4	43	52	4	1	0	1	6	16	41	30	6	0	56	43
105	320	4	50	50	0	0	0	4	28	30	18	18	4	0		40
106	399	3	100	0	0	0	0	5	0	0	10	25	60	0		47
106	399	3	0	0	0	100	0	5	0	0	0	35	60	0		90
107	338	4	40	50	10	0	0	7	14	16	34	21	7	0	34	49
107	338	4	75	25	0	0	0	0	10	30	30	20	10	0	34	54
108	434	3	10	90	0	0	0	20	30	15	10	20	5	0		47
109	332	3	65	32	3	0	0	5	21	30	37	6	1	0		38

Table 3. (cont'd) Site characteristics (elevation, stream order, habitat type, substrate type, conductivity, and maximum depth) for survey sites.

Site	Elevation (meters)	Stream Order	[1] Habitat(%)				[2] Bottom Type (%)								Cond[3]	Max Depth (cm)
			Riffle	Run	Flat	Pool	fines	sand	gravel	pebble	cobble	rock	boulder	bedrock		
110	30	3	95	5	0	0	0	8	15	20	40	18	0	0		39
111	223	4	43	53	5	0	0	0	6	17	30	35	13	0	34	47
112	132	4	53	48	0	0	0	0	23	30	30	13	5	0		33
112	132	4	5	95	0	0	0	0	10	20	40	20	10	0		42
113	52	4	55	33	13	0	0	2	9	18	27	29	3	13	144	34
114	229	3	53	38	8	3	0	4	9	19	24	32	5	8	58	46
115	98	4	59	37	5	0	1	3	8	19	34	25	4	7	40	46
116	11	5	60	40	0	0	0	6	11	35	28	15	5	0	49	42
117	38	4	42	56	3	0	0	3	11	26	44	14	2	0	46	48
118	91	3	70	25	5	0	5	10	10	20	50	5	0	0		45
119	23	4	73	25	0	2	0	8	18	29	40	4	0	0	57	44
120	299	3	29	71	0	0	0	2	10	20	27	31	10	0	36	49
121	279	4	69	29	1	1	0	9	19	28	35	9	0	0	42	36
122	389	3	50	50	0	0	0	4	6	10	30	30	20	0		46
123	366	3	50	50	0	0	0	3	7	20	20	40	10	0		42
124	21	6	50	50	0	0	0	10	25	55	10	0	0	0		40
125	70	3	90	7	3	0	0	7	12	22	27	20	13	0		35
126	256	4	7	62	17	14	0	18	25	22	22	13	0	0		68
127	261	4	50	50	0	0	0	20	20	30	30	0	0	0		54
128	242	5	75	25	0	0	1	14	30	28	25	3	0	0		43
129	274	4	42	58	0	0	0	5	11	21	32	30	1	0	31	48
130	282	3	70	30	0	0	10	10	20	30	30	0	0	0		40
131	12	4	63	34	3	0	0	5	12	24	45	12	2	0	113	32
134	3	3	51	37	11	1	2	4	15	28	36	11	4	0	112	48
135	50	3	53	36	11	0	2	7	16	30	34	11	0	0	95	29
136	29	4														
137	81	3														
138	130	3														
139	149	2														
140	168	2														
141	162	3														

Table 3. (cont'd) Site characteristics (elevation, stream order, habitat type, substrate type, conductivity, and maximum depth) for survey sites.

	Elevation	Stream	[1] Habitat(%)				[2] Bottom Type (%)									Max
Site	(meters)	Order	Riffle	Run	Flat	Pool	fines	sand	gravel	pebble	cobble	rock	boulder	bedrock	Cond[3]	Depth (cm)
142	76	3														
143	305	4	0	100	0	0	0	0	20	30	40	10	0	0		
144	427	3	100	0	0	0										
145	282	4	12	72	7	10	0	6	9	12	17	27	31	0	33	62
146	316	4	26	70	3	1	0	9	6	11	23	31	15	5	38	59
147	245	4	78	19	3	0	0	5	12	20	39	15	3	6	34	40
148	320	2														
149	273	2														
150	8	7	26.7	43.3	20	10	2	5	13	22	33.5	22	2.5	0		68
151	258	2														
152	229	3	100	0	0	0	0		0	5	20	50	25	0		
153	305	3	51	44	3	2	1	7	12	21	30	25	5	0	31	43
156	168	3														
157	15	3														
158	73	2														
159	84	3					2	3	45	40	5	5	0	0		27
160	96	3														
161	38	3														
162	52	3														
163	101	3														
164	149	3														
165	64	4														
166	12	4														
167	30	3														
168	76	3														
174	105	3	100	0	0	0	0	5	33	38	19	5	0	0		24
178	78	2	100	0	0	0	0	0	20	25	25	20	10	0		25
186	317	3	25	59	14	2	0	1	7	16	32	40	4	0	38	51
188	232	4	60	40	0	0	0	20	30	40	10	0	0	0		40
190	25	5	38.6	59	1.7	0.71	0	8	11	17	37	24	3	0	40	50
191	71	2	76.7	12.5	11	0	1	6	14	18	35	23	3	0	89	34

Table 3. (cont'd) Site characteristics (elevation, stream order, habitat type, substrate type, conductivity, and maximum depth) for survey sites.

	Elevation	Stream	[1] Habitat(%)				[2] Bottom Type (%)									Max
Site	(meters)	Order	Riffle	Run	Flat	Pool	fines	sand	gravel	pebble	cobble	rock	boulder	bedrock	Cond[3]	Depth (cm)
192	84	4	80	20	0	0	0	15	20	20	20	20	5	0		36
193	84	4	40	60	0	0	0	0	10	10	10	30	30	10		46
194	232	2	40	50	10	0	0	5	10	10	35	35	5	0		40
195	121	4	65	28.8	6.3	0	0	3	11	18.5	26	28.5	5	8	49	41
196	153	4	80	15	5	0	0	0	15	15	30	30	10	0		33
197	64	4	90	10	0	0	0	10	20	30	30	10	0	0		39
198	82	3	50	50	0	0	0	0	5	15	50	30	0	0		55
199	12	5	30	70	0	0	0	0	0	60	20	15	5	0		36
200	8	7	42	56	2	0	0	1	11	22	39	26	1	0	57	39
201	293	4	30	43.3	22	5	0	3	8	22	39	27	1	0	38	52
202	36	5	15	45	35	5	0	3	11	25	37.5	22.5	1	0		57
203	46	6	50	49	1	0	0	2.5	12.5	17.5	50	17.5	0	0		49
204	92	6	45	55	0	0	0	5	10	34	40	10	1	0		36
205	318	3	23	43	12	22	0	10	20	20	10	10	30			
206	273	3	27.5	72.5	0	0	0	12	20	35	30	4	0	0	37	62
207	328	3	45	10	45	0	0	5	15	23	15	28	15	0	29	37
208	321	2	55	40	5	0	0	2.5	12.5	22.5	22.5	32.5	7.5	0	62	36
209	267	3	60	35	5	0	0	10	10	30	45	4	1	0		41
210	186	4	39	60	1	1	0	3	12	22	35	23	5	0	36	44
211	138	4	16.7	50	33	0	0	6.7	10	31.7	30	18.3	3.3	0		44
212	110	4	48	34	19	0	1	6	14	29	23	7	2	20	32	34
213	13	6	40	32	22	7	2	3	8	22	40	18	5	2	66	39
214	288	3	38	54	9	0	0	1	1	6	19	17	5	52	29	46
215	27	5	61.9	36.9	1.3	0	1	6	10	19	33	28	5	0	59	39
216	8	6	83	15	3	0	0	11	23	31	33	3	0	0	53	33
Average			**48**	**41**	**9**	**2**	**0**	**5**	**12**	**24**	**30**	**20**	**6**	**4**	**45**	**42**

Table 4. Number of sites sampled by sub-watershed and within the main branches of the Miramichi River, 1970 to 2004.

	Southwest Miramichi							Northwest Miramichi					Miramichi River		
Year	Barnaby	Renous	Dungarvon	SW Miramichi	Bartholomew	Cains	Taxis	NW Millstream	NW Miramichi	Sevogle	Tomogonops	LSW Miramichi	SW Miramichi	NW Miramichi	Total
1970		5		28	3			3	4				36	7	43
1971	2	5		31	3	4			5			4	45	9	54
1972	2	4		28	3	4	3	3	5			4	44	12	56
1973	2	7		30	3	4	3	3	7		1	4	49	15	64
1974	2	6	3	30	5	4	3	3	20	3	1	4	53	31	84
1975	2	6	3	30	10	4	3	5	19	3	3	4	58	34	92
1976	2	5	2	24	13	4	3	7	18	3	4	4	53	36	89
1977	2	5	3	28	13	4	3	7	19	3	4	4	58	37	95
1978	2	5	3	29	13	4	3	6	19	3	4	4	59	36	95
1979		3	3	17	7	4	2	5	7	3	3	4	36	22	58
1980		3	2	17	11	3	2	4	6	3		4	38	17	55
1981		3	2	16	10	4	2	4	8	3		4	37	19	56
1982	2	5	3	29		4	2	6	18	3	2	7	45	36	81
1983	2	5	3	29		4	2	6	18	3		4	45	31	76
1984	2	5	3	29	12	4	2		18	3		4	57	25	82
1985		2		16		4	1		7			4	23	11	34
1986		2		13		3	1		4			4	19	8	27
1987				6		3			1			3	9	4	13
1988		2		6	5	3			1			3	16	4	20
1989				6	9	3			1			3	18	4	22
1990				6	9	3			1			3	18	4	22
1991				1					1			1	1	2	3
1992				6		2			1			3	8	4	12
1993	2	5	3	27		5	3		15	3		4	45	22	67
1994	2	5	4	22	2	5	2	2	19	8	2	12	42	43	85
1995	1	3	2	9	1	2	1		6	3		8	19	17	36
1996	1	4	4	10	1	4	1		10	4		7	25	21	46
1997	3	4	6	16	1	9	2	2	14	5	1	7	41	29	70
1998	3	5	5	15	1	4	8	2	12	6	1	8	41	29	70
1999	3	4	5	15	1	4	2	2	15	6	2	9	34	34	68
2000	2	4	5	18	1	5	3	2	15	6	1	8	38	32	70
2001	3	4	5	16	1	5	3	2	14	6	2	11	37	35	72
2002	2	5	5	16	1	6	3	2	13	7	2	10	38	34	72
2003	2	3	6	15	1	5	2	2	13	8	1	6	34	30	64
2004	2	3	7	15	1	6	3	2	14	7	1	8	37	32	69
Total All years	48	127	87	649	141	136	68	80	368	102	35	181	1256	766	2022

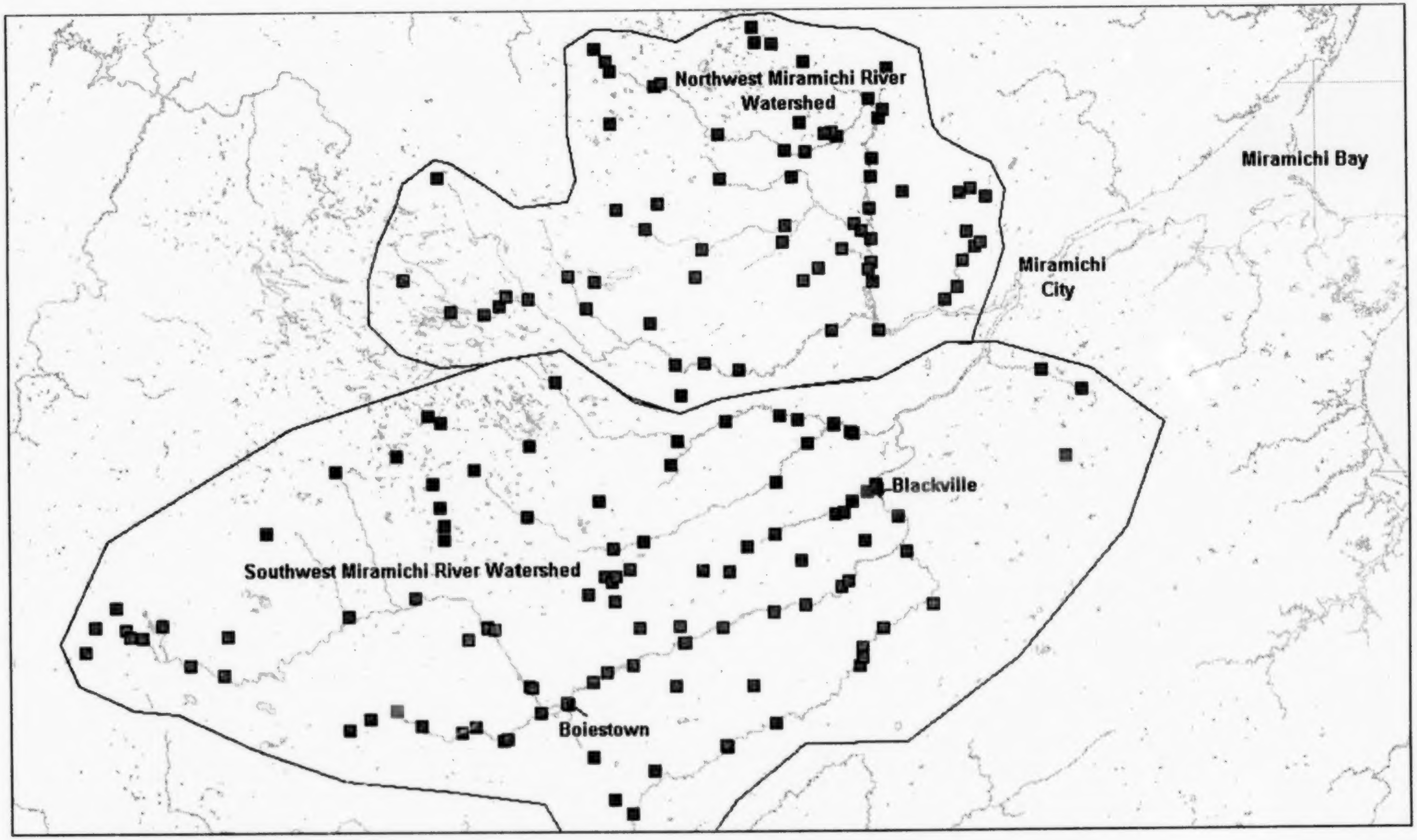

Northwest Miramichi River Watershed
Miramichi Bay
Miramichi City
Blackville
Southwest Miramichi River Watershed
Boiestown

Figure 1. The Miramichi River watershed and survey sites (Scale: 1 cm = 7.5 km).

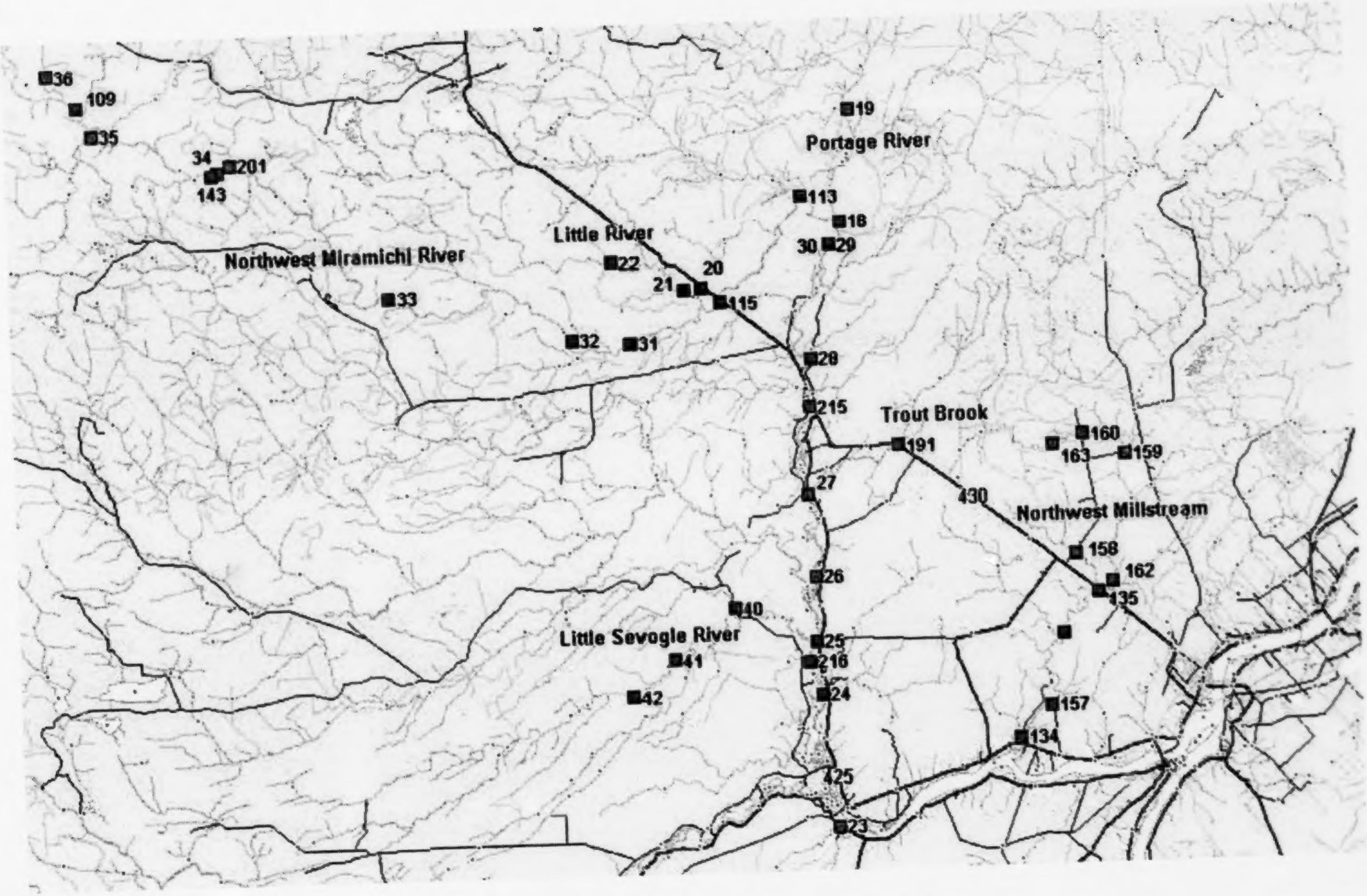

36
109
35
34
201
143
Northwest Miramichi River
33
Little River
22
20
21
115
32
31
19
Portage River
113
18
30
29
28
215
Trout Brook
191
160
163
159
27
430
Northwest Millstream
158
162
135
26
40
Little Sevogle River
41
42
25
216
24
157
134
425
23

Figure 2. Survey Sites on the main stem of the Northwest Miramichi River and smaller tributaries (Northwest Miramichi watershed – Scale: 1 cm = 2.8 km).

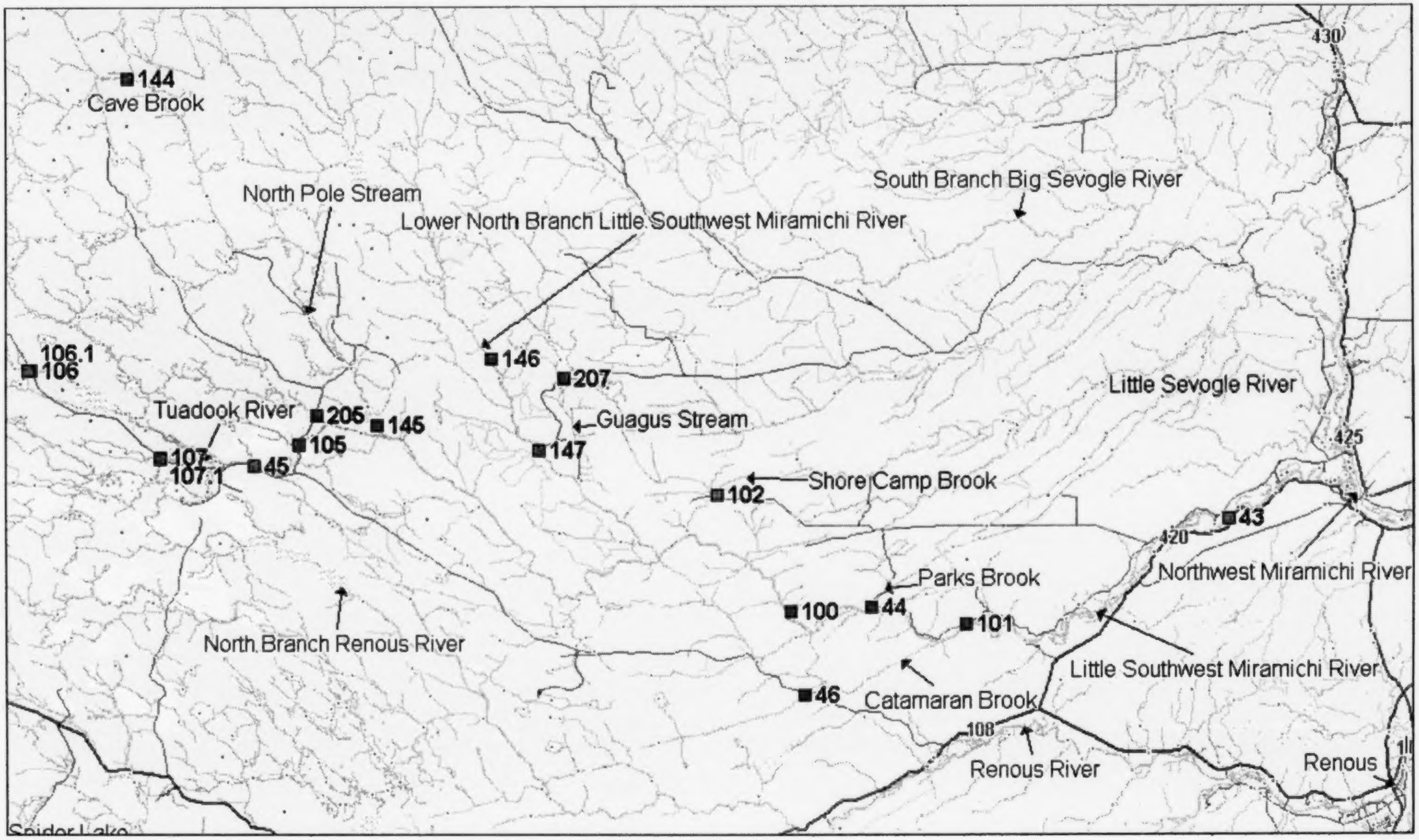

144
Cave Brook
North Pole Stream
Lower North Branch Little Southwest Miramichi River
South Branch Big Sevogle River
430
106.1
106
146
207
Little Sevogle River
Tuadook River
205
145
Guagus Stream
105
147
425
107
107.1
45
102
Shore Camp Brook
43
420
Northwest Miramichi River
Parks Brook
100
44
101
North Branch Renous River
Little Southwest Miramichi River
46
Catamaran Brook
108
Renous River
Renous
Spider Lake

Figure 3. Survey sites on the Little Southwest Miramichi River basin (Northwest Miramichi watershed – Scale: 1 cm = 2.8 km).

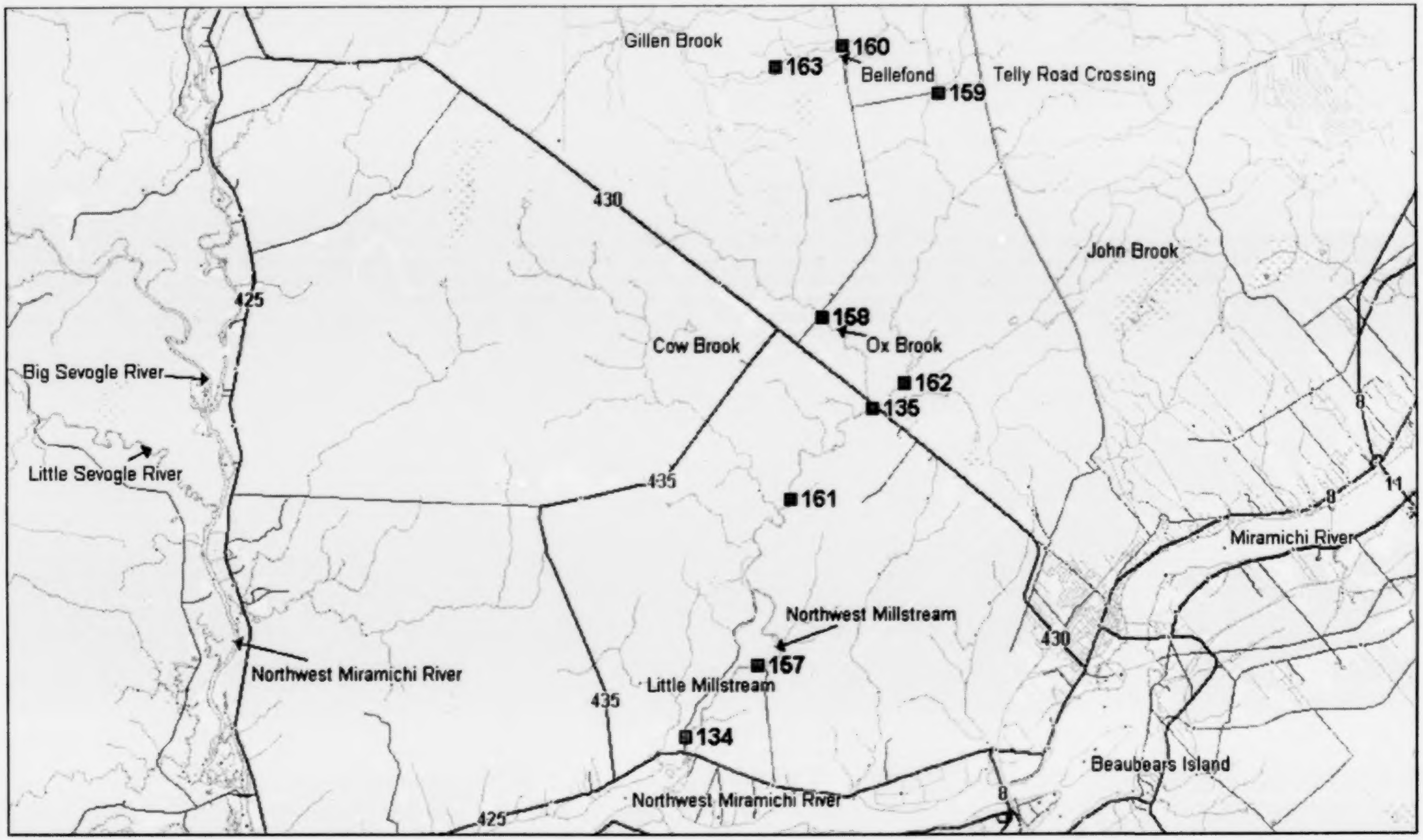

Gillen Brook
160
163
Bellefond
Telly Road Crossing
159
430
John Brook
425
158
Cow Brook
Ox Brook
Big Sevogle River
162
135
Little Sevogle River
435
161
8
11
Miramichi River
Northwest Millstream
430
157
Northwest Miramichi River
Little Millstream
435
134
Beaubears Island
Northwest Miramichi River
8
425

Figure 4. Survey Sites on the Northwest Millstream basin (Northwest Miramichi watershed – Scale 1 cm = 1.2 km).

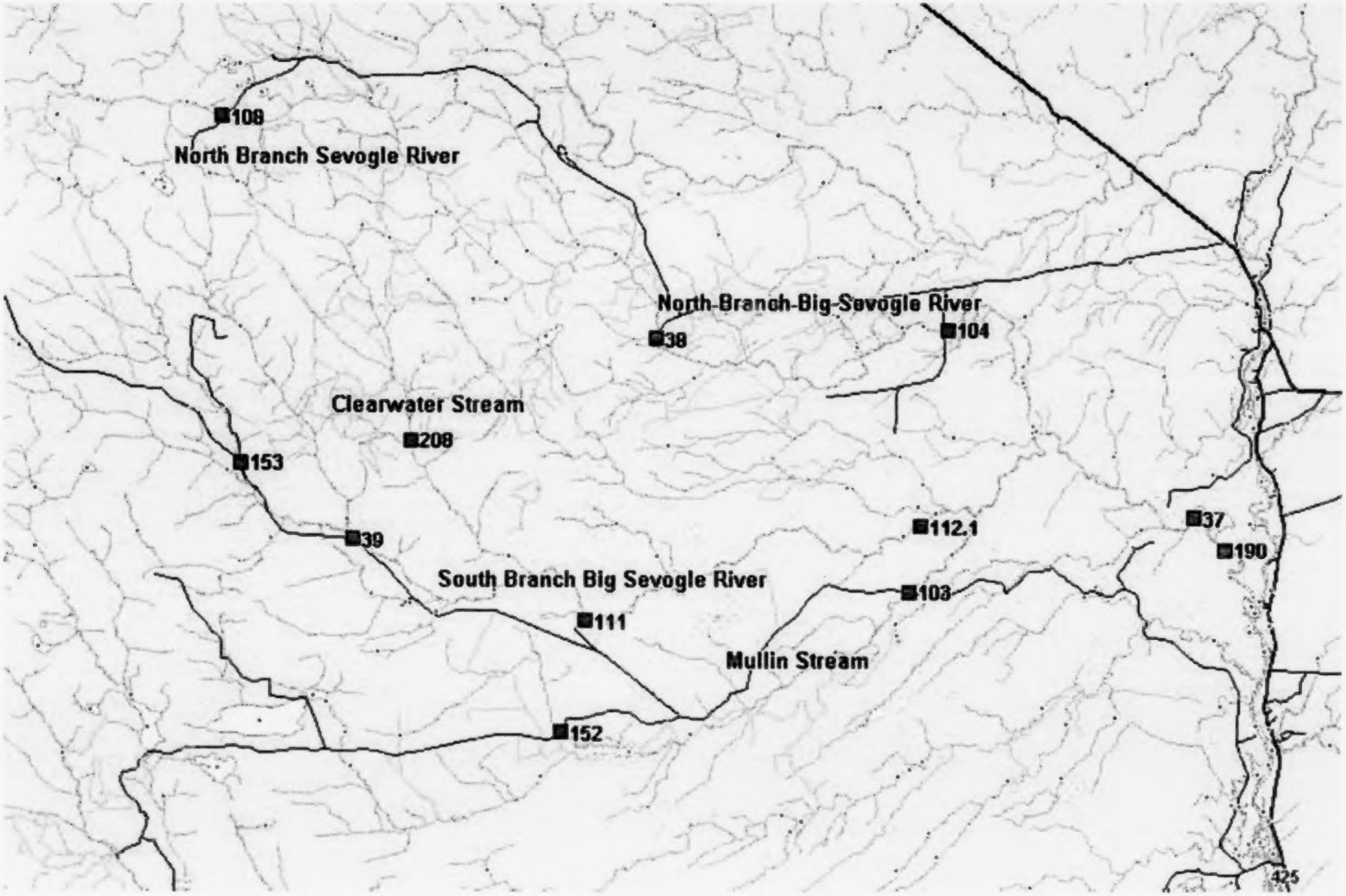

108
North Branch Sevogle River
North Branch Big Sevogle River
38
104
Clearwater Stream
208
153
39
112.1
37
190
South Branch Big Sevogle River
103
111
Mullin Stream
152
425

Figure 5. Survey sites on the Sevogle River basin (Northwest Miramichi watershed - Scale: 1 cm = 2.2 km).

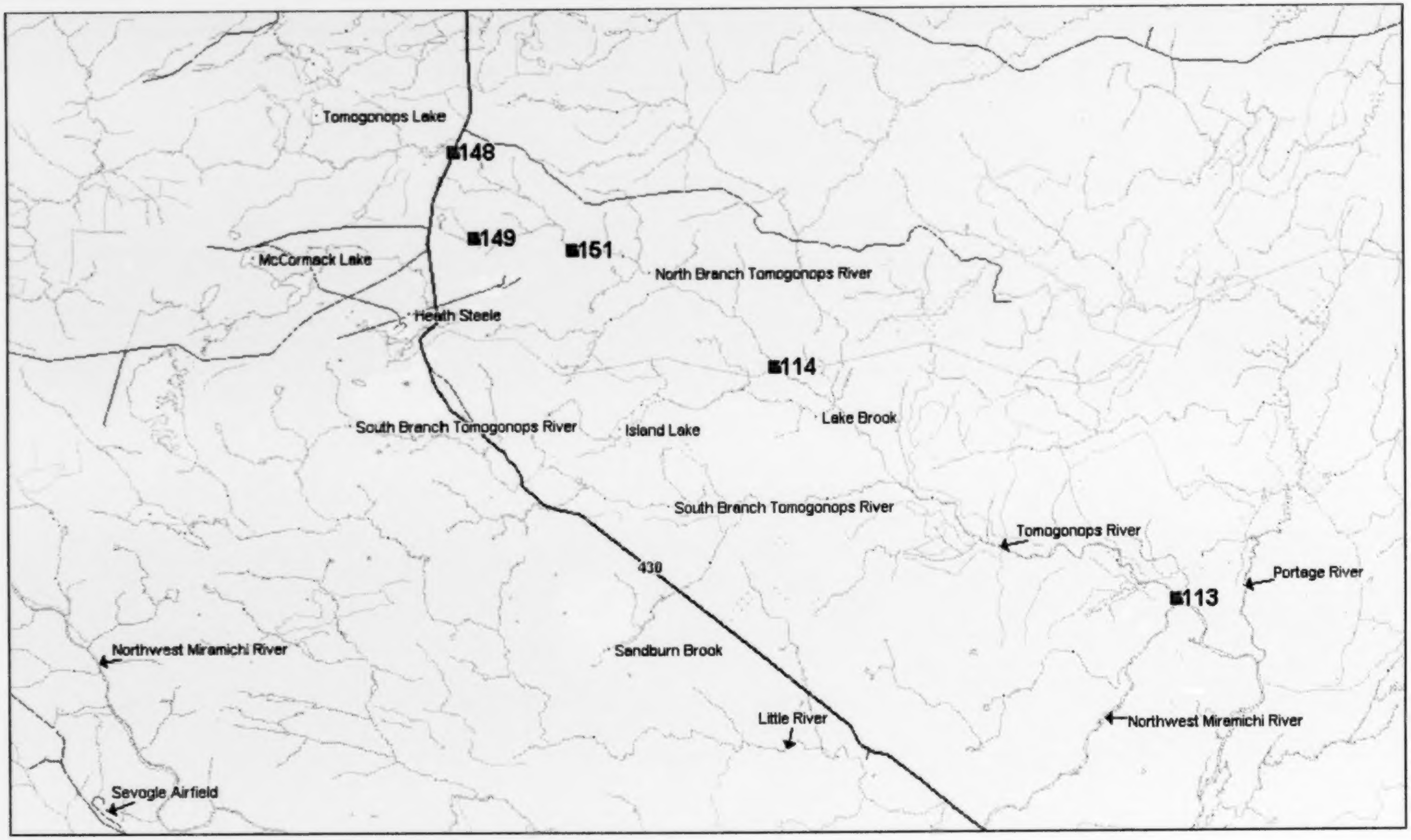

Tomogonops Lake
148
149
151
McCormack Lake
North Branch Tomogonops River
Heath Steele
114
South Branch Tomogonops River
Island Lake
Lake Brook
South Branch Tomogonops River
Tomogonops River
Portage River
430
113
Northwest Miramichi River
Sandburn Brook
Little River
Northwest Miramichi River
Sevogle Airfield

Figure 6. Survey sites on the Tomogonops River basin (Northwest Miramichi watershed - Scale: 1 cm = 1.2 km).

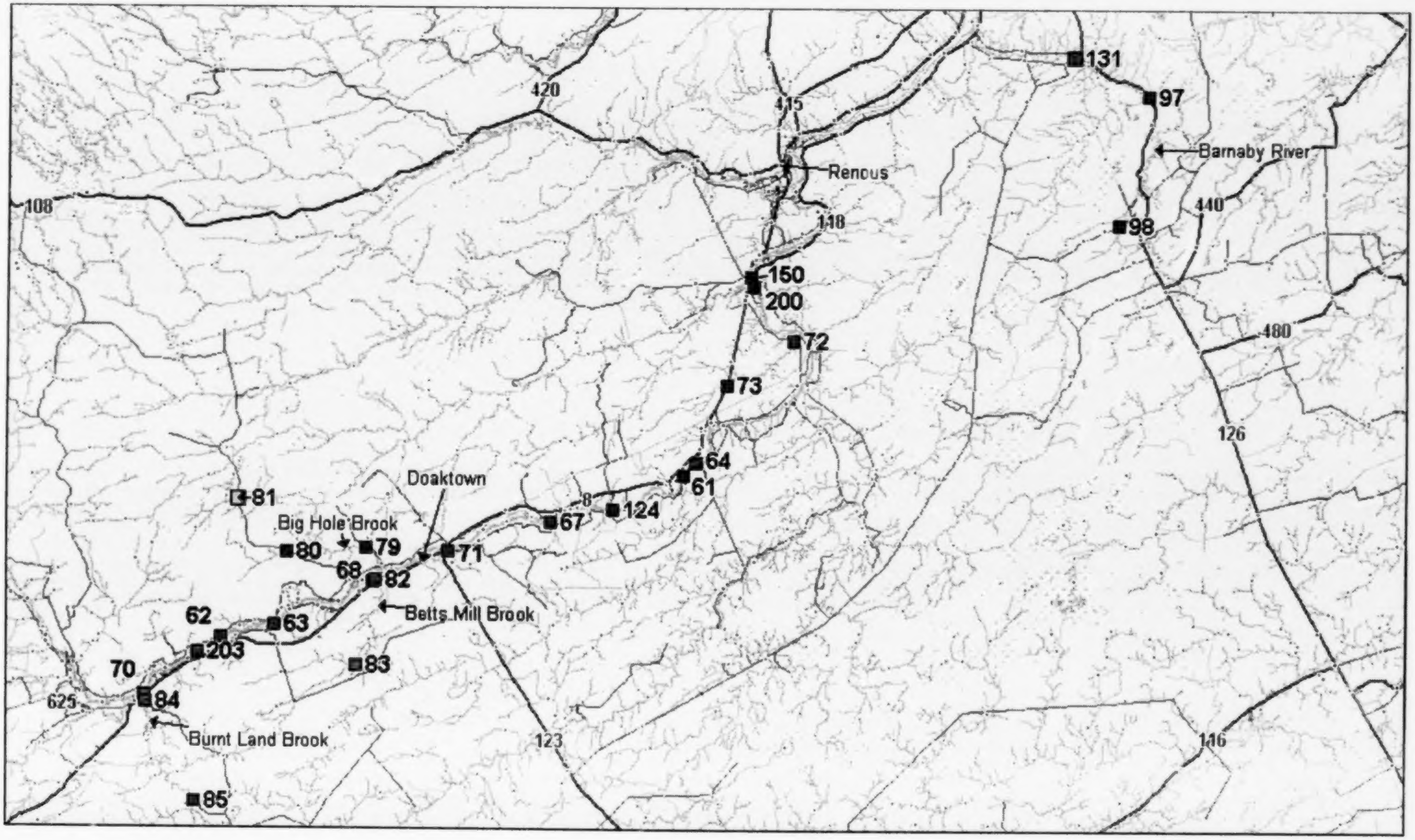

131
97
420
415
Renous
Barnaby River
108
440
118
98
150
200
72
480
73
126
64
61
Doaktown
81
8
124
67
Big Hole Brook
80
79
71
68
82
Betts Mill Brook
62
63
203
83
70
625
84
Burnt Land Brook
123
116
85

Figure 7. Survey sites on the main stem Southwest Miramichi River and small tributaries downstream from Boiestown (Southwest Miramichi watershed – Scale: 1 cm = 3.9 km).

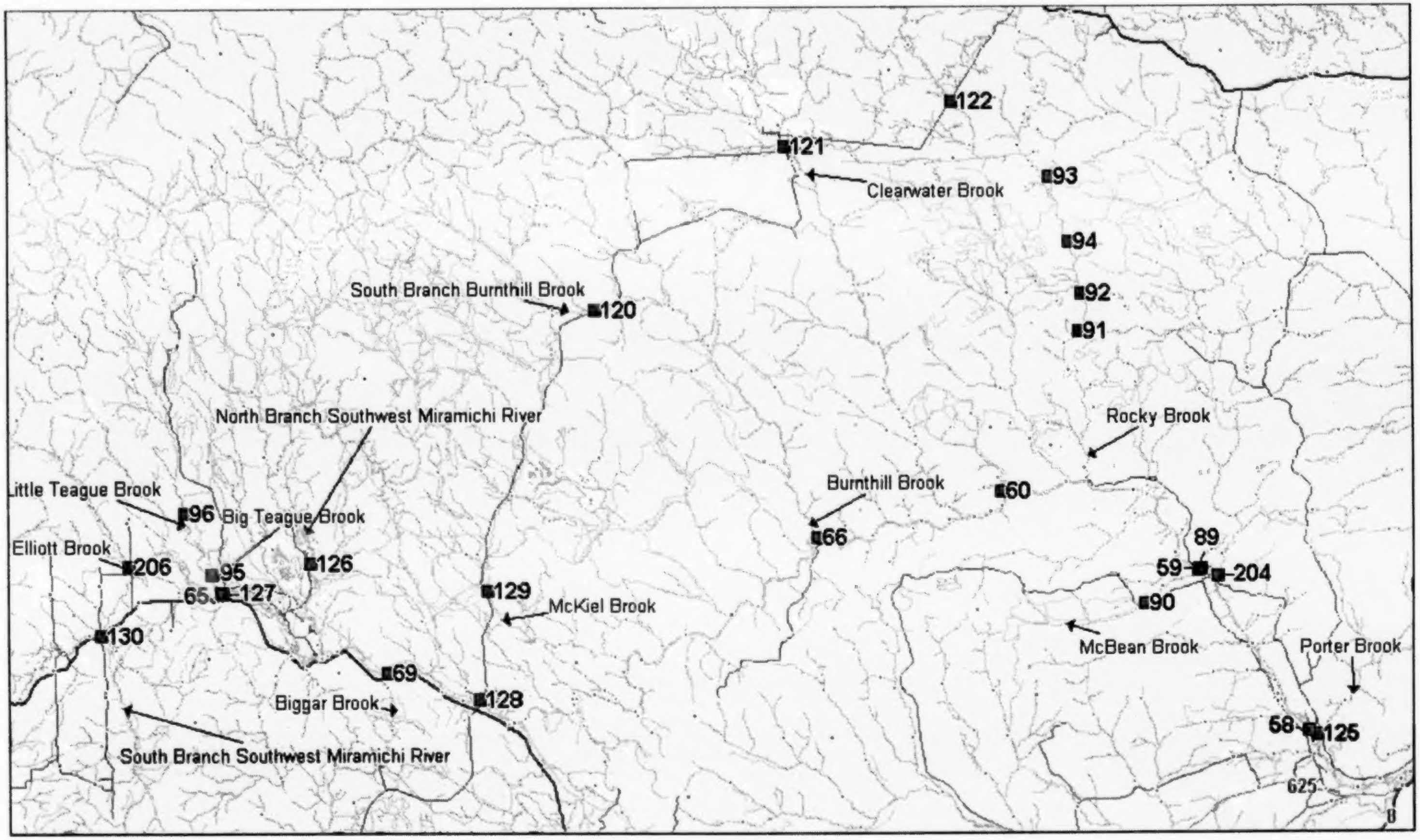

122
121
Clearwater Brook
93
94
South Branch Burnthill Brook
120
92
91
North Branch Southwest Miramichi River
Rocky Brook
Little Teague Brook
Burnthill Brook
60
96
Big Teague Brook
66
Elliott Brook
89
206
95
126
59
204
65
127
129
90
McKiel Brook
130
McBean Brook
Porter Brook
69
128
Biggar Brook
58
125
South Branch Southwest Miramichi River
625
8

Figure 8. Survey sites on the main stem Southwest Miramichi River and small tributaries upstream from Boiestown (Southwest Miramichi watershed – Scale 1 cm = 2.8 km).

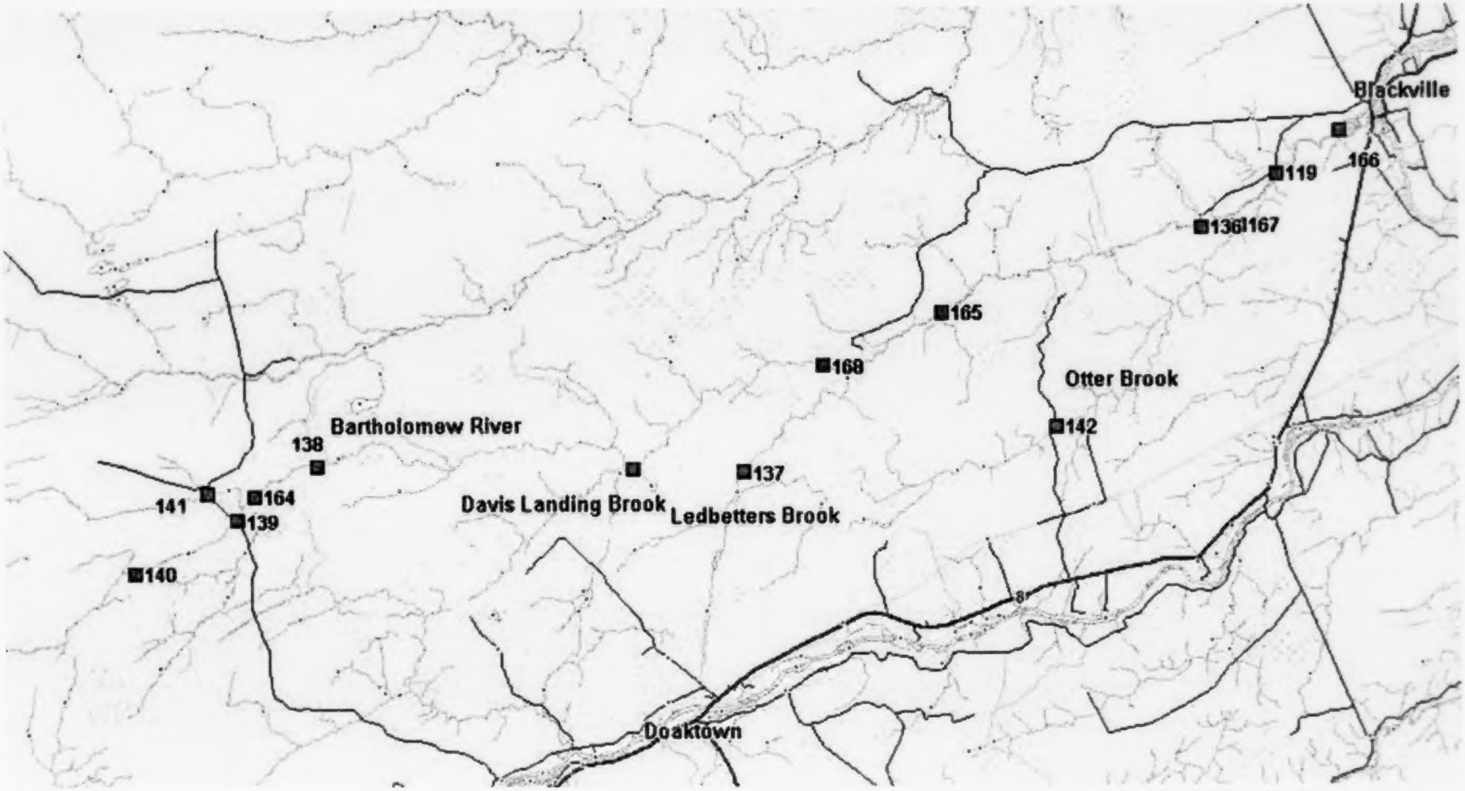

Blackville
166
119
136
167
165
168
Otter Brook
142
Bartholomew River
138
137
Davis Landing Brook
Ledbetters Brook
141
164
139
140
8
Doaktown

Figure 9. Survey sites on the Bartholomew River basin (Southwest Miramichi watershed – Scale: 1 cm= 2.4 km).

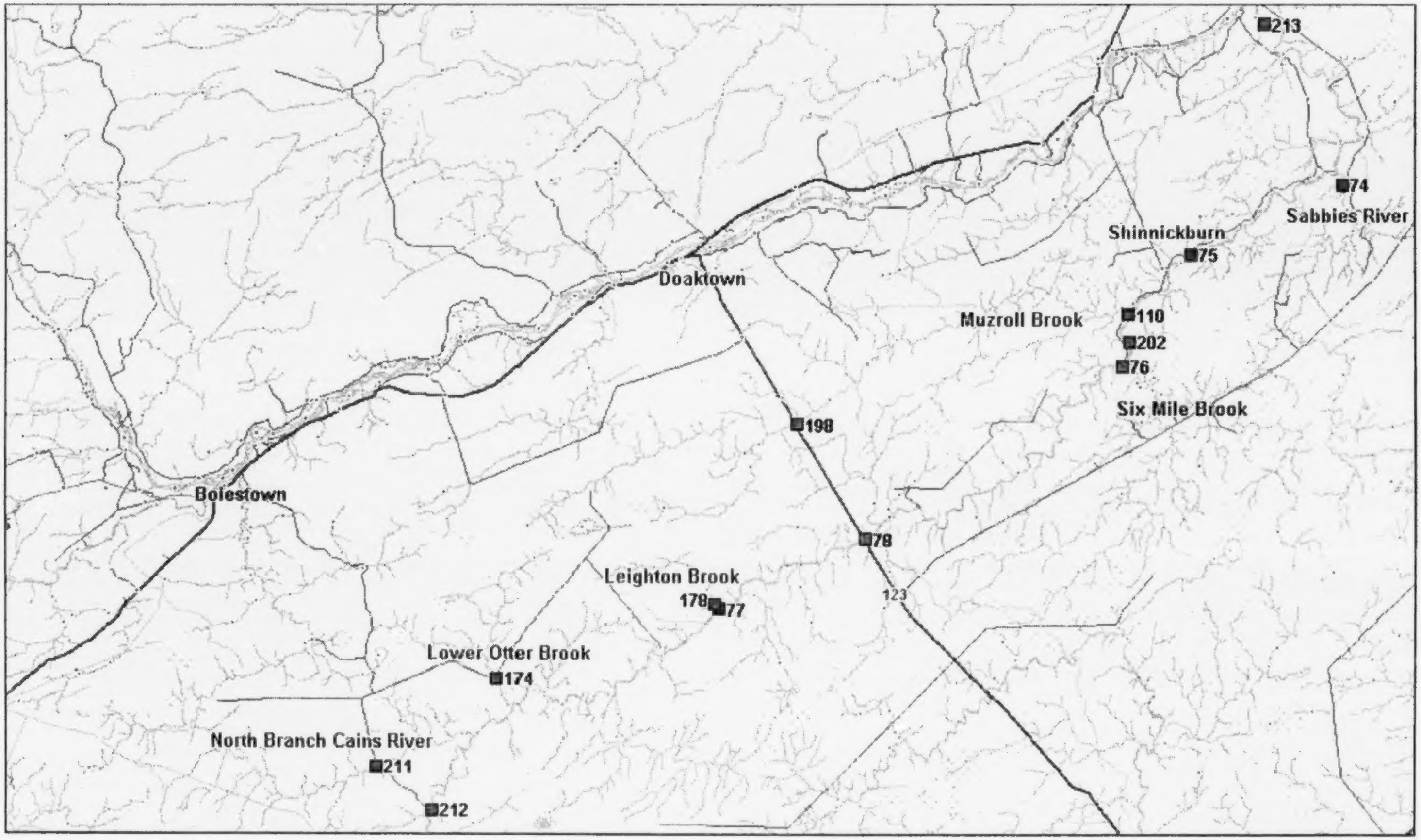

213
74
Sabbies River
Shinnickburn
75
Doaktown
Muzroll Brook
110
202
76
Six Mile Brook
198
Boiestown
78
Leighton Brook
123
178
77
Lower Otter Brook
174
North Branch Cains River
211
212

Figure 10. Survey sites on the Cains River basin (Southwest Miramichi watershed – Scale: 1 cm = 2.6 km).

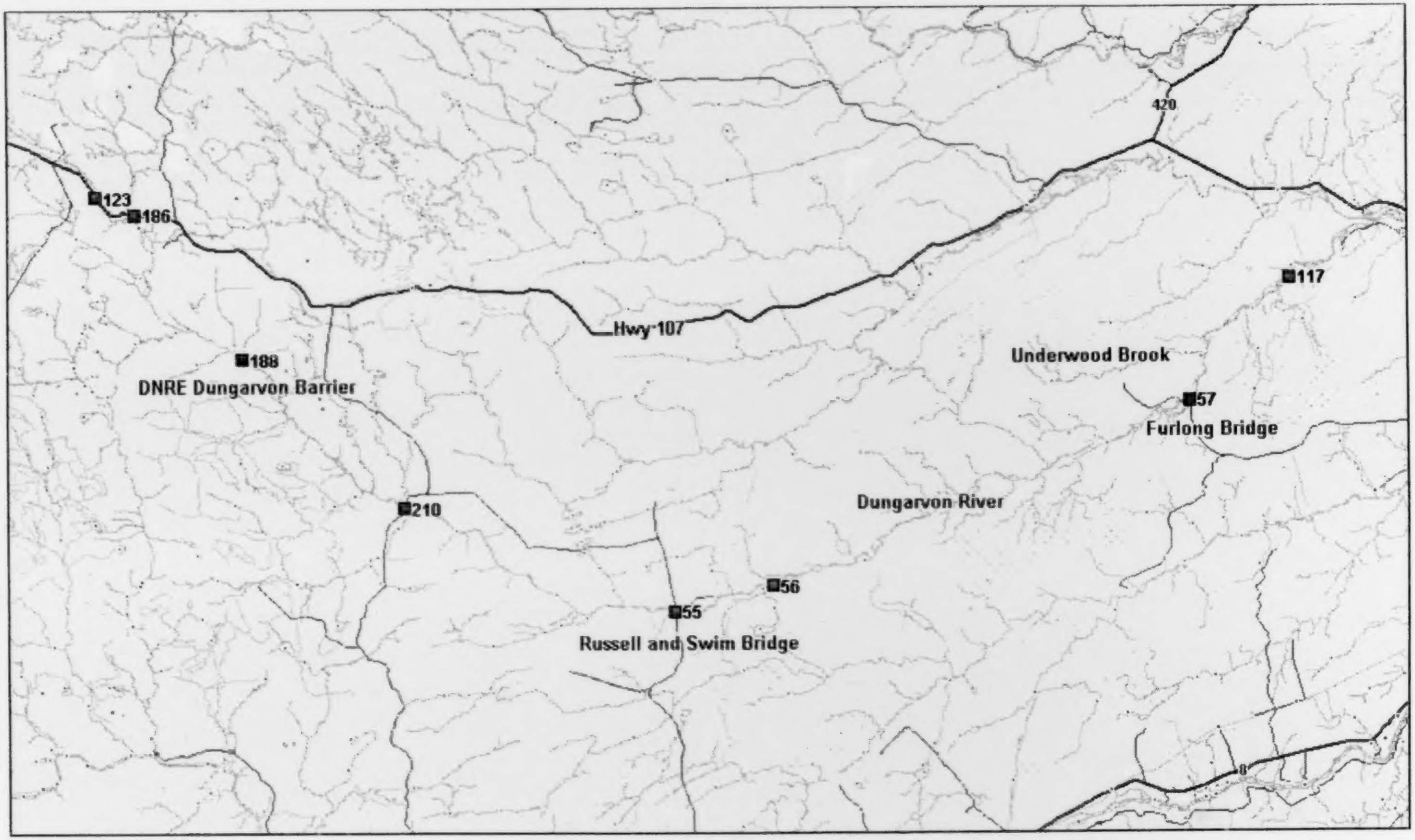

420
123
186
117
Hwy 107
188
DNRE Dungarvon Barrier
Underwood Brook
57
Furlong Bridge
210
Dungarvon River
56
55
Russell and Swim Bridge
8

Figure 11. Survey sites on the Dungarvon River basin (Southwest Miramichi watershed – Scale: 1 cm = 2.5 km).

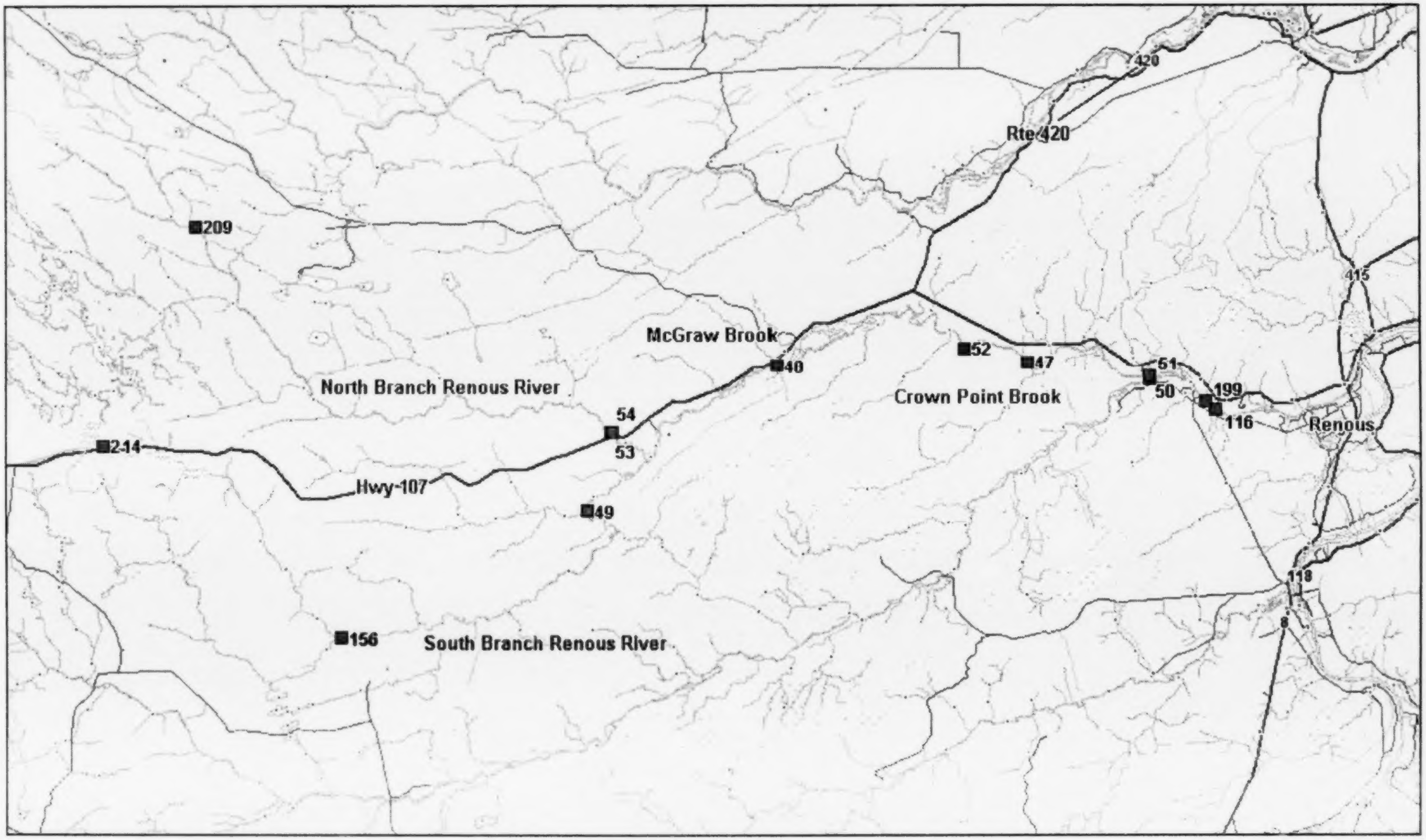

420
Rte 420
209
415
McGraw Brook
52
47
40
51
50
199
North Branch Renous River
Crown Point Brook
54
116
Renous
214
53
Hwy 107
49
118
8
156
South Branch Renous River

Figure 12. Survey sites on the Renous River basin (Southwest Miramichi watershed – Scale: 1 cm = 2.2 km).

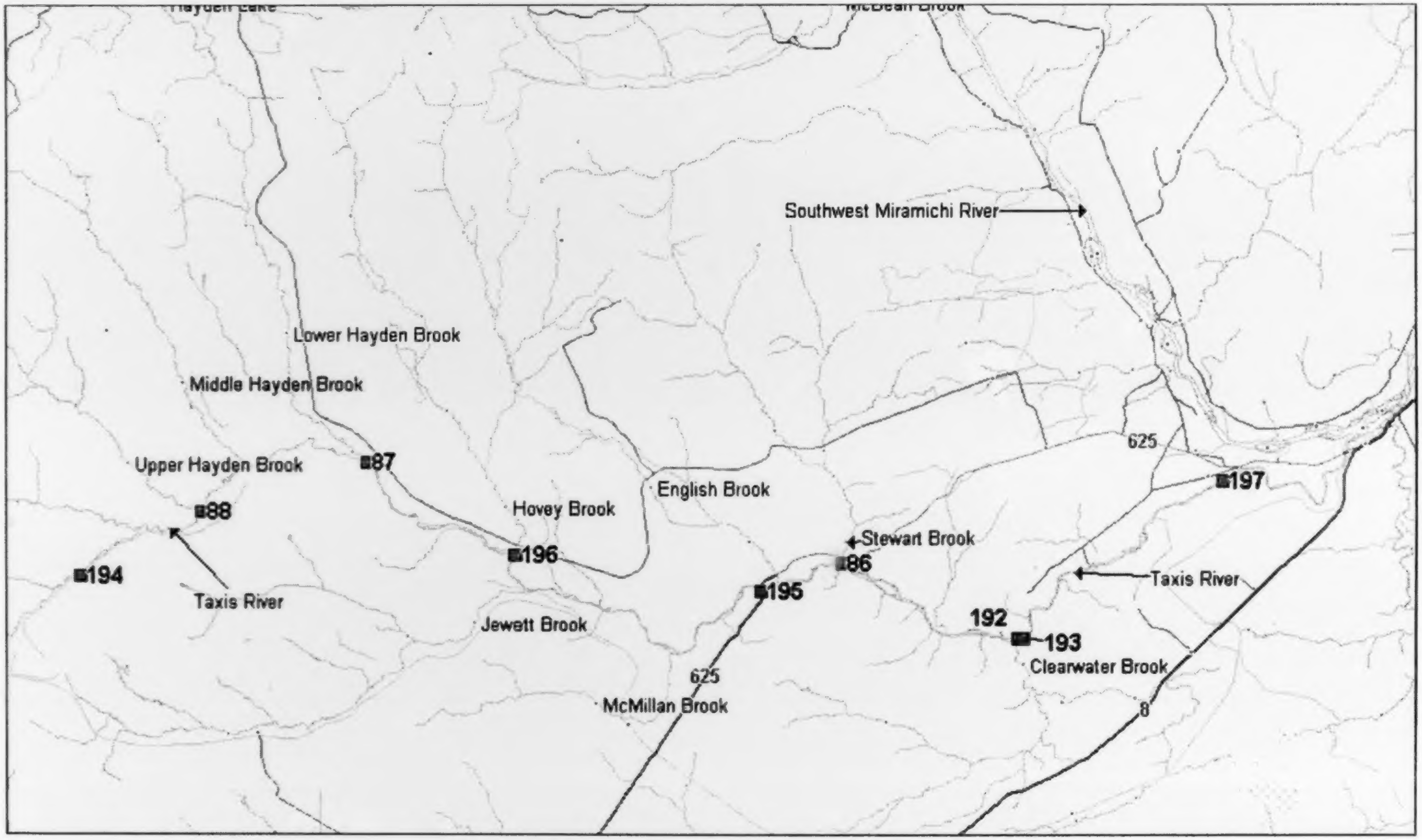
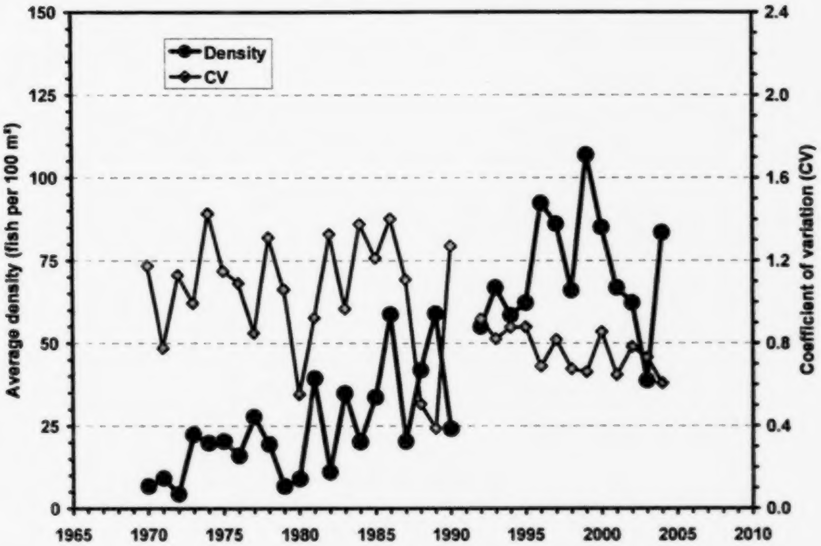

Southwest Miramichi River
Lower Hayden Brook
Middle Hayden Brook
Upper Hayden Brook
87
88
194
Taxis River
Hovey Brook
196
English Brook
Stewart Brook
86
195
625
197
Taxis River
192
193
Jewett Brook
Clearwater Brook
625
McMillan Brook
8

Figure 13. Survey sites on the Taxis River basin (Southwest Miramichi watershed – Scale: 1 cm = 1.3 km).


Northwest Miramichi

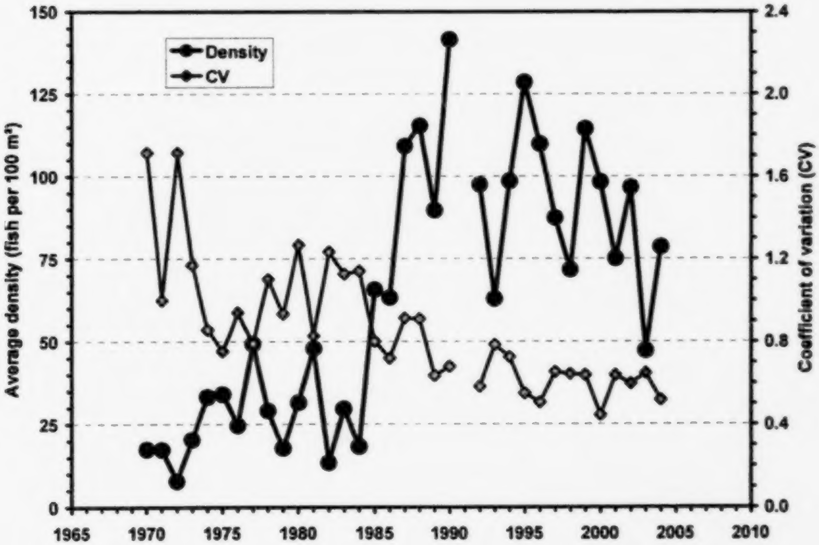
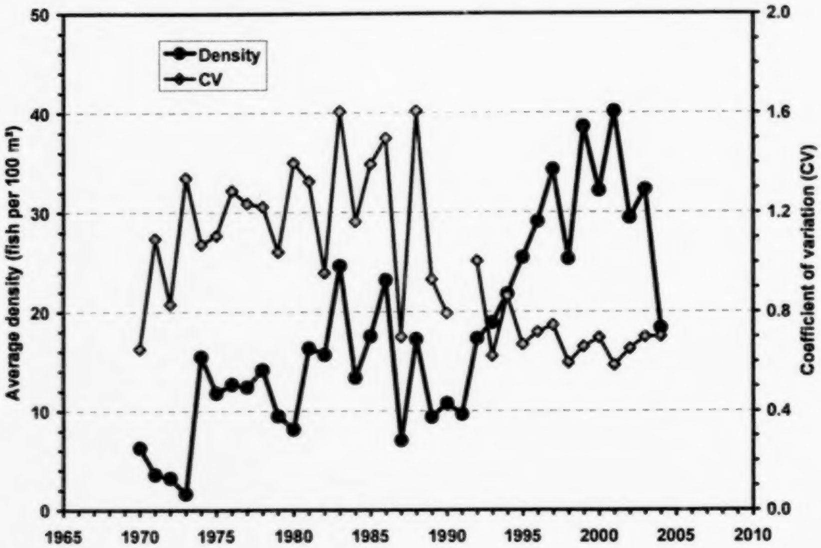

Southwest Miramichi

Figure 14. Average density (fish per 100 m²) of fry and the coefficient of variation (CV) by year of sampling from the Northwest Miramichi River (upper) and Southwest Miramichi River (lower) standard sites, 1970 to 2004. These summaries exclude sampling from Bartholomew River, Tomogonops Rivers, and Northwest Millstream. Coefficient of variation is calculated when at least three sites were sampled annually.

Northwest Miramichi



Southwest Miramichi

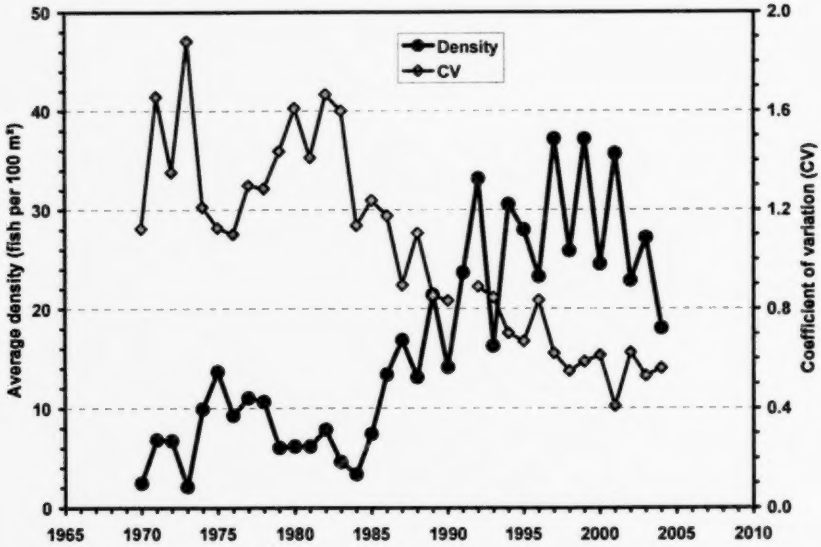
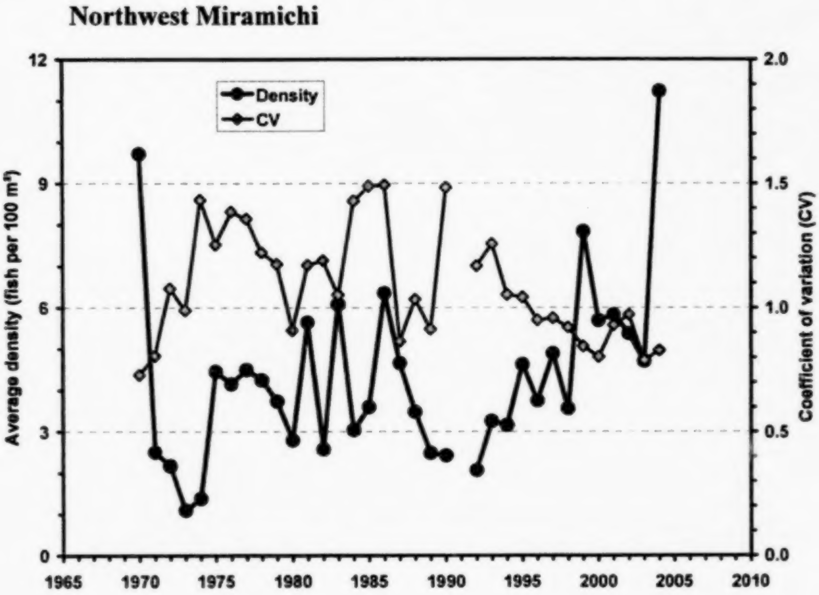


Figure 15. Average density (fish per 100 m²) of age-1 parr and the coefficient of variation (CV) by year of sampling from the Northwest Miramichi River (upper) and Southwest Miramichi River (lower) standard sites, 1970 to 2004. These summaries exclude sampling from Bartholomew River, Tomogonops Rivers, and Northwest Millstream. Coefficient of variation is calculated when at least three sites were sampled annually.


Northwest Miramichi

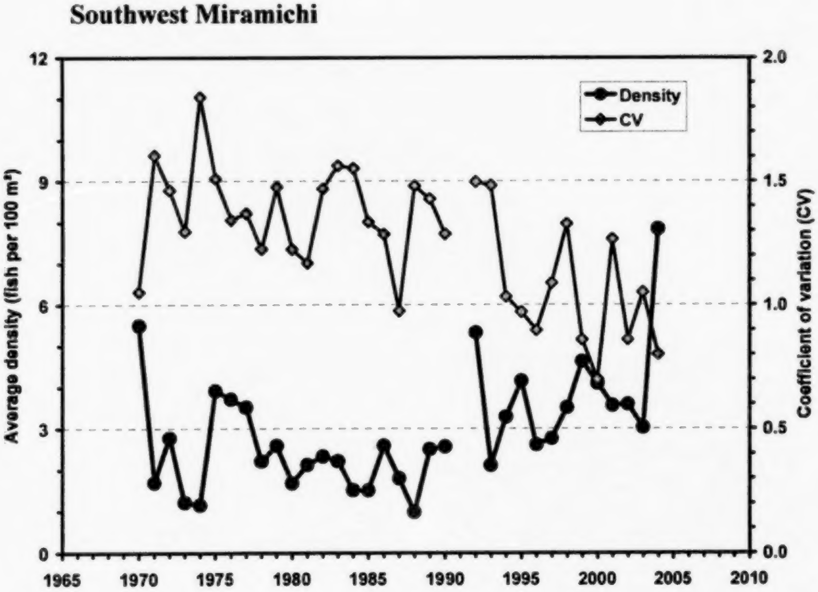
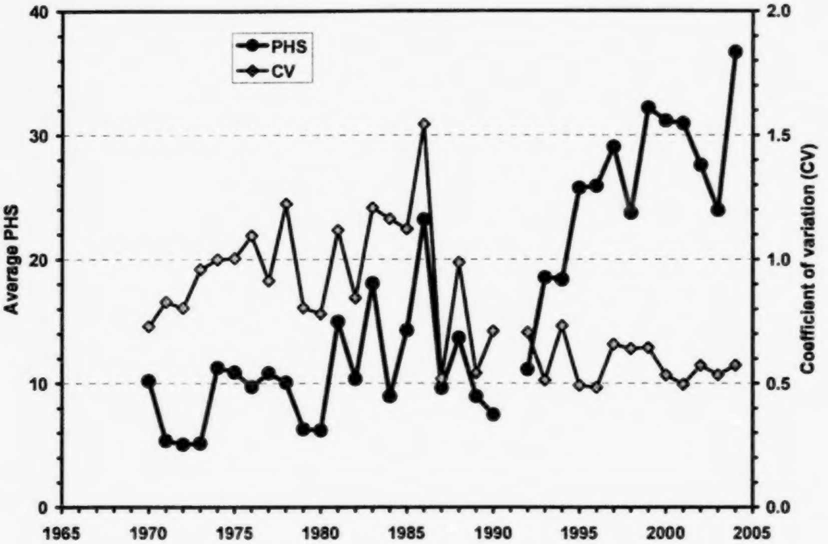

Southwest Miramichi

Figure 16. Average density (fish per 100 m²) of age-2+ parr and the coefficient of variation (CV) by year of sampling from the Northwest Miramichi River (upper) and Southwest Miramichi River (lower) standard sites, 1970 to 2004. These summaries exclude sampling from Bartholomew River, Tomogonops Rivers, and Northwest Millstream. Coefficient of variation is calculated when at least three sites were sampled annually.

Northwest Miramichi



Southwest Miramichi

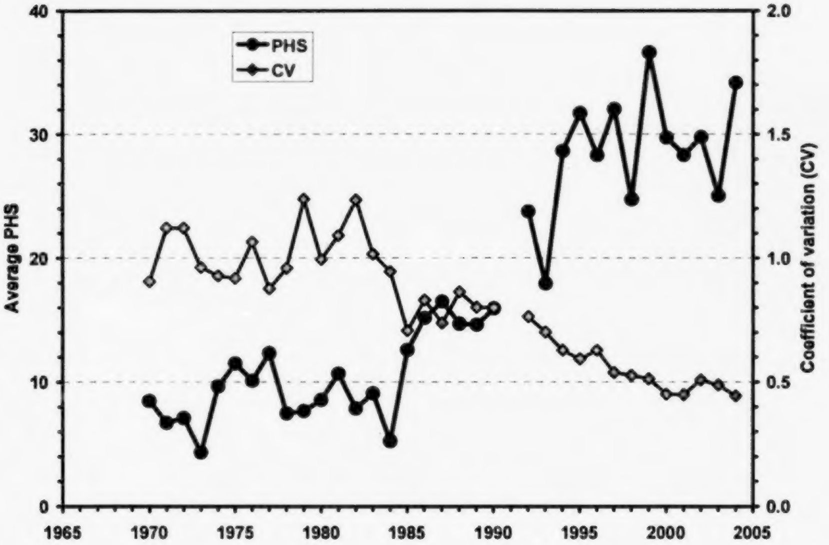
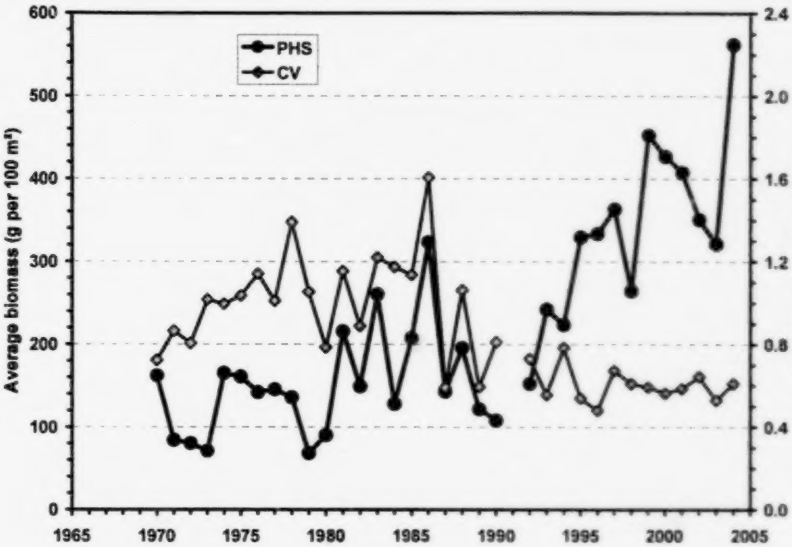


Figure 17. Average Percent Habitat Saturation (PHS) index and the coefficient of variation (CV) by year of sampling from the Northwest Miramichi River (upper) and Southwest Miramichi River (lower) standard sites, 1970 to 2004. These summaries exclude sampling from Bartholomew River, Tomogonops Rivers, and Northwest Millstream. Coefficient of variation is calculated when at least three sites were sampled annually.

Northwest Miramichi



Southwest Miramichi

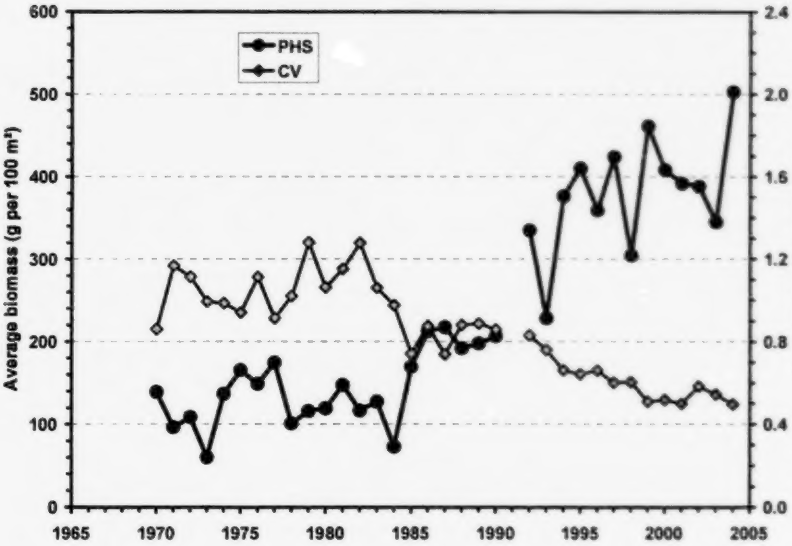


Figure 18. Average biomass (g per 100 m²) and the coefficient of variation (CV) by year of sampling from the Northwest Miramichi River (upper) and Southwest Miramichi River (lower) standard sites, 1970 to 2004. These summaries exclude sampling from Bartholomew River, Tomogonops Rivers, and Northwest Millstream. Coefficient of variation is calculated when at least three sites were sampled annually.

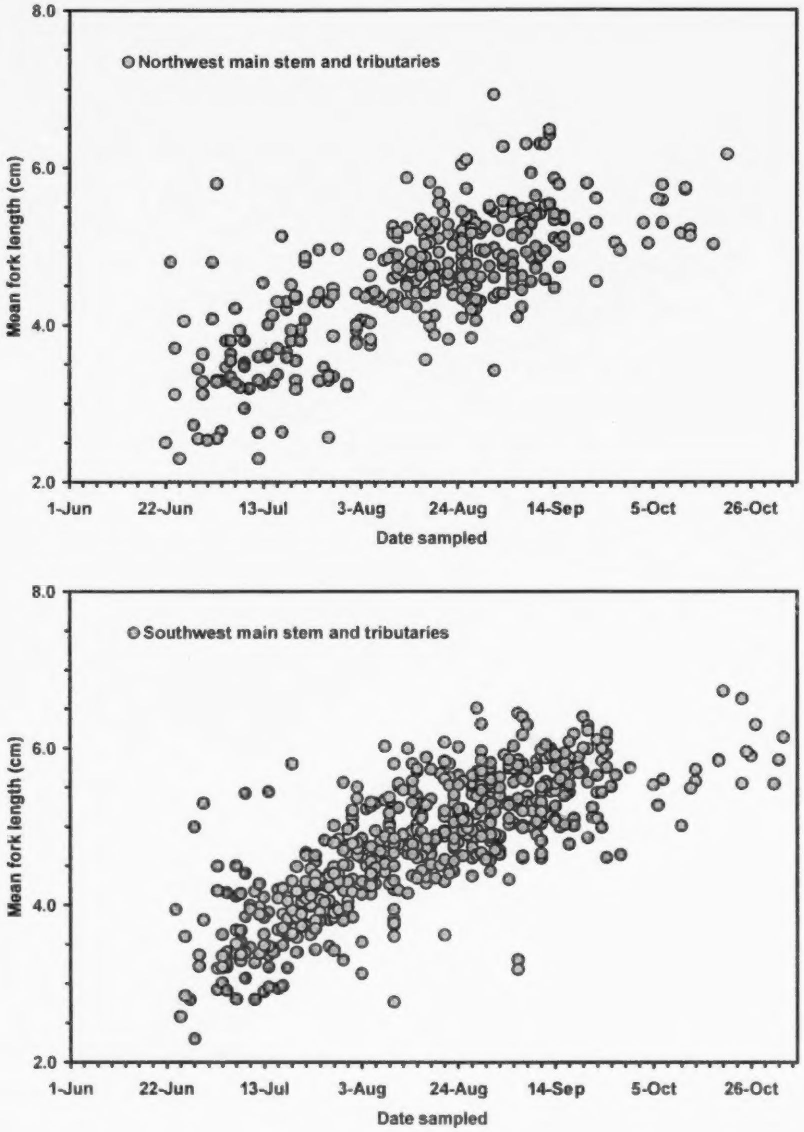
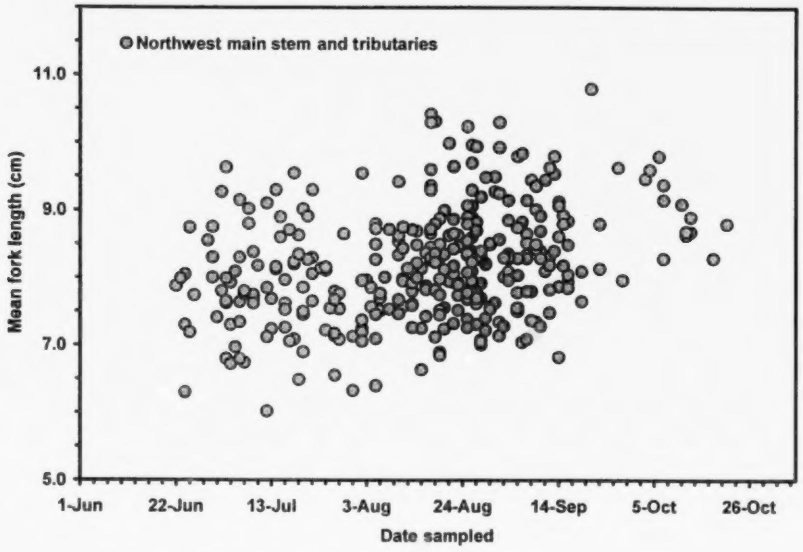


Figure 19. Average fork length (cm) by sampling date of fry from the Northwest Miramichi main stem and tributaries (upper) and from the Southwest Miramichi main stem and tributaries (lower) for the time series 1970 to 2004.



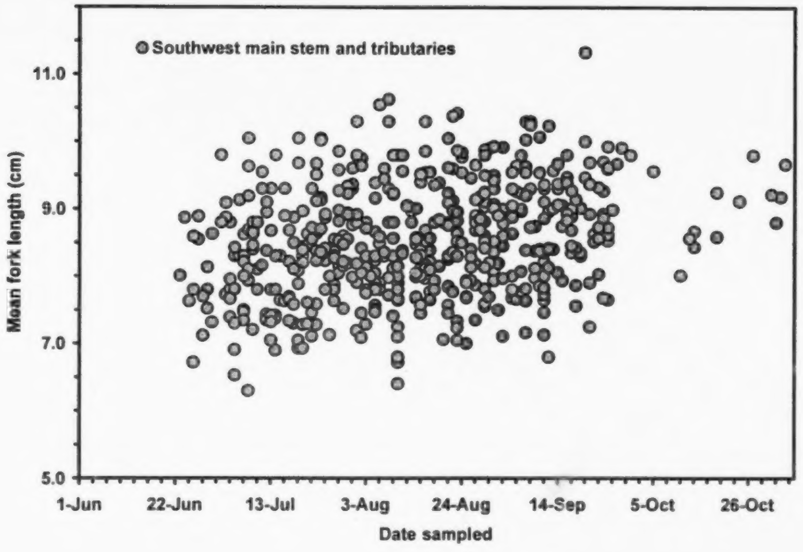
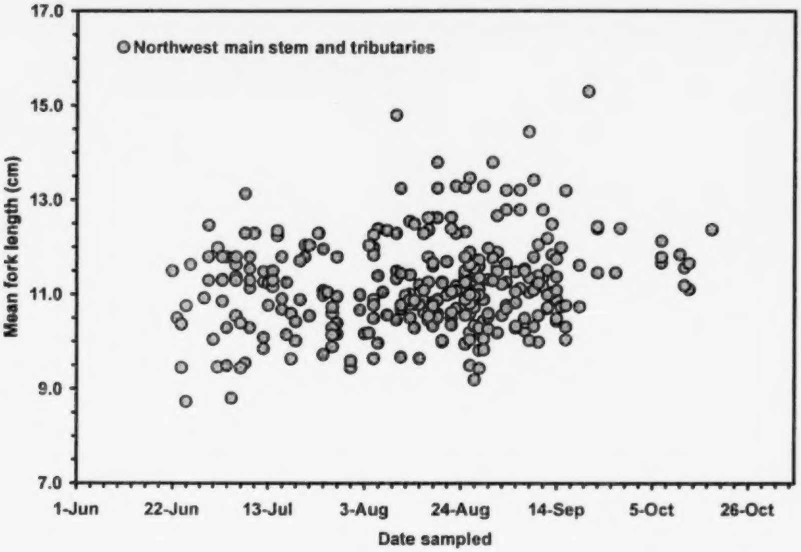


Figure 20. Average fork length (cm) by sampling date of age 1+ parr from the Northwest Miramichi main stem and tributaries (upper) and from the Southwest Miramichi main stem and tributaries (lower) for the time series 1970 to 2004.



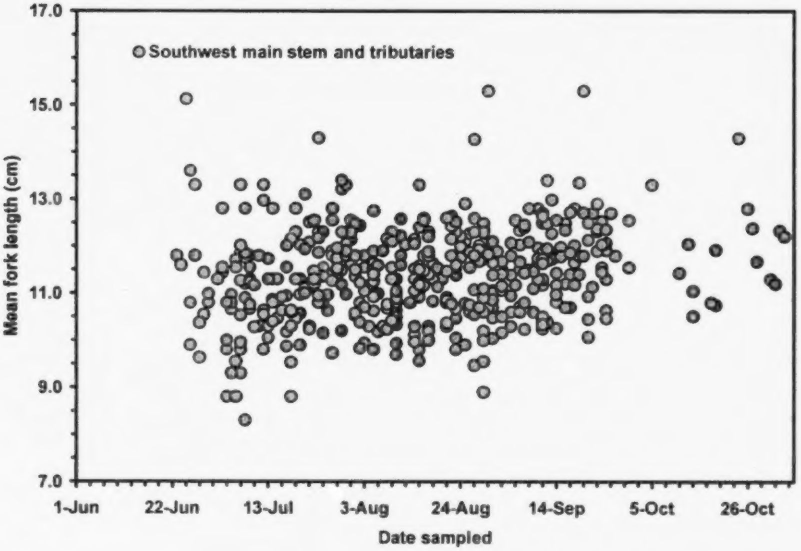


Figure 21. Average fork length (cm) by sampling date of age 1+ parr from the Northwest Miramichi main stem and tributaries (upper) and from the Southwest Miramichi main stem and tributaries (lower) for the time series 1970 to 2004.

Appendix 1. Atlantic salmon density estimates and 95% confidence intervals for 1970-2004.

River	Site	Estimator	Removal Sweeps	Year	Month	Day	Density (fish per 100m^2), variance, and/or upper and lower 95% CI									
							Age 0	lower	upper	Age 1	Var 1	Age 2+	Var 2+	Parr	lower	upper
NW Millstream	134	Zippin		1982	8	31	20.3	n.a.	n.a.					33.3	n.a.	n.a.
NW Millstream	134	CPUE		1994	9	1	123.9	53.2	288.3	69.9		3.9		73.8	31.5	173.1
NW Millstream	134	CPUE		1998	8	28	81.6	35.2	189.5	27.7		1.3		29.0	12.5	67.3
NW Millstream	134	CPUE		1999	9	1	146.4	62.8	341.1	49.2		0.0		49.2	21.1	114.7
NW Millstream	134	CPUE		2000	10	4	63.2	27.1	147.4	30.8		1.8		32.6	14.0	76.1
NW Millstream	134	CPUE		2001	9	11	59.0	25.3	137.4	25.0		1.6		26.6	11.4	61.9
NW Millstream	134	CPUE		2002	9	6	29.9	12.9	69.6	14.2		2.2		16.4	7.0	38.0
NW Millstream	134	CPUE		2003	8	28	13.8	5.9	32.1	11.2		3.9		15.1	6.5	35.0
NW Millstream	134	CPUE		2004	8	24	6.8	2.9	16.0	0.0		18.2		18.2	7.8	42.2
NW Millstream	135	Zippin		1975	9	11	0.0	n.a.	n.a.					10.0	n.a.	n.a.
NW Millstream	135	Zippin		1976	8	31	17.4	n.a.	n.a.					1.8	n.a.	n.a.
NW Millstream	135	Zippin		1978	8	28	18.5	n.a.	n.a.					4.5	n.a.	n.a.
NW Millstream	135	Zippin		1979	7	12	3.9	n.a.	n.a.					1.6	n.a.	n.a.
NW Millstream	135	Zippin		1980	9	29	2.3	n.a.	n.a.					5.6	n.a.	n.a.
NW Millstream	135	Zippin		1981	7	22	3.8	n.a.	n.a.					0.0	n.a.	n.a.
NW Millstream	135	Zippin		1982	9	22	18.9	n.a.	n.a.					23.2	n.a.	n.a.
NW Millstream	135	Zippin		1983	8	29	14.6	n.a.	n.a.					10.6	n.a.	n.a.
NW Millstream	135	CPUE		1994	9	2	0.0	n.a.	n.a.	31.9		4.0		35.9	15.4	83.4
NW Millstream	135	CPUE		1997	10	1	0.0	n.a.	n.a.	0.0		0.0		0.0	n.a.	n.a.
NW Millstream	135	CPUE		1998	8	6	0.0	n.a.	n.a.	2.9		2.3		5.3	2.2	12.4
NW Millstream	135	CPUE		1999	8	30	0.0	n.a.	n.a.	0.0		0.0		0.0	n.a.	n.a.
NW Millstream	135	CPUE		2000	9	8	58.8	25.2	137.0	0.0		0.0		0.0	n.a.	n.a.
NW Millstream	135	CPUE		2001	9	11	54.5	23.4	127.1	8.8		0.0		8.8	3.8	20.4
NW Millstream	135	CPUE		2002	9	6	46.5	20.0	108.3	22.1		0.9		22.9	9.9	53.3
NW Millstream	135	CPUE		2003	8	28	0.0	n.a.	n.a.	17.8		1.7		19.5	8.4	45.3
NW Millstream	135	CPUE		2004	8	24	11.9	5.1	27.7	2.0		16.3		18.3	7.9	42.7
NW Millstream	157	Zippin		1970	8	26	0.0	n.a.	n.a.					21.3	n.a.	n.a.
NW Millstream	157	Zippin		1972	8	2	0.0	n.a.	n.a.					3.1	n.a.	n.a.
NW Millstream	157	Zippin		1973	8	21	24.6	n.a.	n.a.					3.0	n.a.	n.a.
NW Millstream	157	Zippin		1974	7	25	0.3	n.a.	n.a.					21.6	n.a.	n.a.
NW Millstream	157	Zippin		1975	7	8	3.1	n.a.	n.a.					33.2	n.a.	n.a.
NW Millstream	157	Zippin		1976	9	2	3.0	n.a.	n.a.					25.5	n.a.	n.a.
NW Millstream	157	Zippin		1977	9	11	2.2	n.a.	n.a.					19.9	n.a.	n.a.
NW Millstream	157	Zippin		1978	8	23	16.0	n.a.	n.a.					12.6	n.a.	n.a.
NW Millstream	157	Zippin		1979	7	10	1.7	n.a.	n.a.					13.8	n.a.	n.a.
NW Millstream	157	Zippin		1980	8	29	1.0	n.a.	n.a.					4.3	n.a.	n.a.
NW Millstream	157	Zippin		1981	7	23	4.9	n.a.	n.a.					4.3	n.a.	n.a.
NW Millstream	157	Zippin		1983	8	24	5.9	n.a.	n.a.					28.5	n.a.	n.a.
NW Millstream	158	Zippin		1970	8	26	0.0	n.a.	n.a.					0.0	n.a.	n.a.
NW Millstream	158	Zippin		1972	8	1	0.0	n.a.	n.a.					0.0	n.a.	n.a.
NW Millstream	158	Zippin		1973	8	3	0.0	n.a.	n.a.					0.0	n.a.	n.a.
NW Millstream	158	Zippin		1974	7	15	0.0	n.a.	n.a.					7.8	n.a.	n.a.
NW Millstream	158	Zippin		1975	8	8	0.0	n.a.	n.a.					0.5	n.a.	n.a.
NW Millstream	158	Zippin		1977	7	27	4.9	n.a.	n.a.					12.6	n.a.	n.a.
NW Millstream	159	Zippin		1970	8	25	0.0	n.a.	n.a.					0.0	n.a.	n.a.
NW Millstream	159	Zippin		1972	8	1	0.0	n.a.	n.a.					0.0	n.a.	n.a.
NW Millstream	159	Zippin		1973	8	3	0.0	n.a.	n.a.					0.0	n.a.	n.a.
NW Millstream	159	Zippin		1974	7	15	0.0	n.a.	n.a.					0.0	n.a.	n.a.
NW Millstream	159	Zippin		1975	8	8	0.0	n.a.	n.a.					0.0	n.a.	n.a.
NW Millstream	159	Zippin		1976	8	26	0.0	n.a.	n.a.					4.4	n.a.	n.a.
NW Millstream	159	Zippin		1977	7	26	7.1	n.a.	n.a.					8.9	n.a.	n.a.
NW Millstream	159	Zippin		1978	8	24	5.8	n.a.	n.a.					10.9	n.a.	n.a.
NW Millstream	159	Zippin		1979	7	11	0.0	n.a.	n.a.					10.8	n.a.	n.a.
NW Millstream	159	Zippin		1980	8	27	0.0	n.a.	n.a.					4.2	n.a.	n.a.
NW Millstream	159	Zippin		1981	7	24	41.6	n.a.	n.a.					62.1	n.a.	n.a.
NW Millstream	159	Zippin		1982	9	13	4.6	n.a.	n.a.					7.8	n.a.	n.a.
NW Millstream	159	Zippin		1983	8	30	20.5	n.a.	n.a.					11.9	n.a.	n.a.
NW Millstream	159	CPUE		1997	9	16	0.0	n.a.	n.a.	0.0		0.0		0.0	n.a.	n.a.
NW Millstream	160	Zippin		1975	9	11	0.0	n.a.	n.a.					0.7	n.a.	n.a.
NW Millstream	160	Zippin		1976	7	28	0.0	n.a.	n.a.					0.4	n.a.	n.a.
NW Millstream	160	Zippin		1977	8	9	7.6	n.a.	n.a.					14.7	n.a.	n.a.
NW Millstream	160	Zippin		1978	8	24	38.9	n.a.	n.a.					17.3	n.a.	n.a.
NW Millstream	160	Zippin		1979	7	11	0.0	n.a.	n.a.					15.9	n.a.	n.a.
NW Millstream	160	Zippin		1980	8	25	0.0	n.a.	n.a.					4.1	n.a.	n.a.
NW Millstream	160	Zippin		1981	7	22	0.0	n.a.	n.a.					2.6	n.a.	n.a.
NW Millstream	160	Zippin		1982	9	6	37.6	n.a.	n.a.					28.3	n.a.	n.a.
NW Millstream	160	Zippin		1983	8	30	59.3	n.a.	n.a.					18.7	n.a.	n.a.

Appendix 1 (cont'd). Atlantic salmon density estimates and 95% confidence intervals for 1970-2004.

River	Site	Estimator	Removal Sweeps	Year	Month	Day	Density (fish per 100m^2), variance, and/or upper and lower 95% CI									
							Age 0	lower	upper	Age 1	Var 1	Age 2+	Var 2+	Parr	lower	upper
NW Millstream	161	Zippin		1976	7	29	0.0	n.a.	n.a.					0.0	n.a.	n.a.
NW Millstream	161	Zippin		1977	8	11	0.2	n.a.	n.a.					1.2	n.a.	n.a.
NW Millstream	161	Zippin		1978	8	31	10.4	n.a.	n.a.					3.0	n.a.	n.a.
NW Millstream	161	Zippin		1979	7	12	0.0	n.a.	n.a.					1.0	n.a.	n.a.
NW Millstream	161	Zippin		1982	9	13	8.3	n.a.	n.a.					1.9	n.a.	n.a.
NW Millstream	161	Zippin		1983	8	25	19.1	n.a.	n.a.					4.2	n.a.	n.a.
NW Millstream	162	Zippin		1976	9	9	0.3	n.a.	n.a.					2.7	n.a.	n.a.
NW Millstream	162	Zippin		1977	9	8	0.3	n.a.	n.a.					6.5	n.a.	n.a.
NW Millstream	163	Zippin		1976	8	30	0.0	n.a.	n.a.					0.0	n.a.	n.a.
NW Millstream	163	Zippin		1977	8	8	12.7	n.a.	n.a.					9.7	n.a.	n.a.
NW Millstream	163	Zippin		1978	9	11	11.0	n.a.	n.a.					5.5	n.a.	n.a.
NW Millstream	163	Zippin		1982	9	16	4.3	n.a.	n.a.					0.6	n.a.	n.a.
NW Millstream	163	Zippin		1983	8	26	0.0	n.a.	n.a.					4.5	n.a.	n.a.
NW Miramichi	18	Zippin	5	1972	9	21	5.2	5.2	5.2	0.8	0.0	0.5	n.a.	1.3		
NW Miramichi	18	Zippin	5	1973	9	11	27.6	24.8	30.4	0.0	0.0	0.5	n.a.	0.5		
NW Miramichi	18	Zippin	5	1974	7	10	4.0	1.7	6.2	3.2	0.0	0.3	0.0	3.4		
NW Miramichi	18	Zippin	5	1975	6	24	3.6	n.a.	n.a.	1.0	0.0	0.0	0.0	1.0		
NW Miramichi	18	Zippin	5	1976	6	22	28.6	n.a.	n.a.	5.6	n.a.	1.5	-0.5	7.0		
NW Miramichi	18	Zippin	5	1977	7	15	42.8	n.a.	n.a.	6.3	490.7	0.8	0.0	7.2		
NW Miramichi	18	Zippin	5	1978	8	25	61.0	53.4	68.6	16.4	4.5	2.5	0.0	18.9		
NW Miramichi	18	Zippin	5	1982	10	7	11.0	10.3	11.8	8.4	0.0	1.1	0.0	9.5		
NW Miramichi	18	Zippin	5	1983	10	11	46.0	45.5	46.6	7.1	0.0	2.7	0.1	9.8		
NW Miramichi	18	Zippin	3	1984	7	4	0.4	n.a.	n.a.	1.4	0.2	0.4	n.a.	1.8		
NW Miramichi	18	CPUE		1993	8	26	82.2	35.4	190.8	21.3		0.0		21.3	9.2	49.5
NW Miramichi	18	CPUE		1994	7	22	54.2	23.4	125.8	7.9		0.0		7.9	3.4	18.6
NW Miramichi	19	Zippin	5	1974	9	23	1.7	n.a.	n.a.	11.1	10.0	2.4	n.a.	13.4		
NW Miramichi	19	Zippin	5	1975	6	23	0.6	n.a.	n.a.	0.0	0.0	0.0	0.0	0.0		
NW Miramichi	19	Zippin	5	1976	6	23	0.0	n.a.	n.a.	4.7	-23.7	5.2	n.a.	9.9		
NW Miramichi	19	Zippin	5	1977	7	8	7.3	-2.3	16.8	7.1	n.a.	2.1	-1.3	9.2		
NW Miramichi	19	Zippin	5	1978	9	5	5.2	4.4	6.0	1.9	0.0	0.0	0.0	1.9		
NW Miramichi	19	Zippin	5	1982	10	7	12.4	12.4	12.5	5.8	0.0	1.0	n.a.	6.7		
NW Miramichi	19	Zippin	5	1983	9	27	44.7	39.7	49.7	3.2	n.a.	1.6	n.a.	4.8		
NW Miramichi	19	Zippin	4	1984	7	9	0.0	n.a.	n.a.	7.6	1.1	0.5	n.a.	8.1		
NW Miramichi	20	Zippin	5	1971	6	24	8.9	7.4	10.3	0.3	n.a.	2.3	0.3	2.7		
NW Miramichi	20	Zippin	5	1973	9	1	8.8	8.7	8.8	1.4	0.0	1.9	0.0	3.2		
NW Miramichi	20	CPUE		1993	8	26	21.7	9.3	50.4	7.0		2.0		9.1	3.9	21.1
NW Miramichi	20	CPUE		1994	8	10	49.7	21.4	115.4	36.9		4.9		41.8	18.0	97.4
NW Miramichi	20	CPUE		1995	9	14	64.0	27.6	148.4	31.9		6.1		38.0	16.3	88.4
NW Miramichi	20	CPUE		1996	9	3	94.8	40.8	220.2	42.4		6.0		48.5	20.8	113.0
NW Miramichi	20	CPUE		1997	8	26	55.6	24.0	129.1	25.5		5.4		30.9	13.3	71.8
NW Miramichi	20	CPUE		1998	8	6	76.5	33.0	177.6	21.0		1.4		22.4	9.7	52.0
NW Miramichi	20	CPUE		1999	9	16	78.9	34.0	183.2	24.7		6.3		31.1	13.4	72.1
NW Miramichi	20	CPUE		2000	8	15	135.1	57.6	316.8	34.7		6.1		40.8	17.5	95.4
NW Miramichi	20	CPUE		2001	8	14	98.8	42.3	231.0	38.4		5.0		43.4	18.5	101.5
NW Miramichi	20	CPUE		2002	8	26	95.9	41.0	224.2	26.7		6.3		33.0	14.2	77.1
NW Miramichi	20	CPUE		2003	8	25	46.5	20.0	108.3	44.6		5.4		50.0	21.3	117.2
NW Miramichi	20	CPUE		2004	8	25	113.1	48.3	264.6	13.1		11.2		24.3	10.4	56.4
NW Miramichi	21	Zippin	5	1974	9	8	12.7	10.8	14.5	5.5	0.7	0.6	0.0	6.1		
NW Miramichi	21	Zippin	5	1975	6	26	0.6	0.6	0.6	17.2	n.a.	1.1	-1.8	18.3		
NW Miramichi	21	Zippin	5	1976	6	24	0.0	n.a.	n.a.	5.0	n.a.	1.8	n.a.	6.7		
NW Miramichi	21	Zippin	5	1977	7	13	19.1	2.0	36.2	16.6	119.0	7.0	n.a.	23.6		
NW Miramichi	21	Zippin	5	1978	8	18	13.7	13.0	14.4	22.0	0.7	2.9	0.6	24.8		
NW Miramichi	21	Zippin	5	1982	9	16	1.6	1.6	1.6	2.8	n.a.	0.6	0.0	3.4		
NW Miramichi	21	Zippin	5	1983	9	12	25.9	25.3	26.6	18.8	0.8	6.3	1.3	25.1		
NW Miramichi	21	Zippin	4	1984	7	16	4.5	n.a.	n.a.	13.0	8.0	5.1	21.6	18.1		
NW Miramichi	22	Zippin	5	1973	8	26	80.1	77.7	82.5	1.1	n.a.	1.1	n.a.	2.2		
NW Miramichi	22	Zippin	5	1974	9	6	19.1	16.6	21.5	23.1	0.8	0.7	0.0	23.7		
NW Miramichi	22	Zippin	5	1975	6	25	0.4	n.a.	n.a.	7.5	n.a.	4.1	0.0	11.6		
NW Miramichi	22	Zippin	5	1976	6	25	0.0	n.a.	n.a.	30.3	0.9	3.3	n.a.	33.7		
NW Miramichi	22	Zippin	5	1977	7	12	11.4	8.5	14.2	7.0	0.1	5.6	0.1	12.6		
NW Miramichi	22	Zippin	5	1978	9	7	66.2	63.3	69.0	15.6	0.1	2.8	0.0	18.3		
NW Miramichi	22	Zippin	5	1982	9	23	16.7	14.7	18.6	9.9	0.8	1.2	0.0	11.2		
NW Miramichi	22	Zippin	5	1983	9	9	25.5	24.6	26.5	18.9	0.2	1.6	-0.6	20.5		
NW Miramichi	22	Zippin	4	1984	7	16	0.0	n.a.	n.a.	11.1	0.3	3.4	n.a.	14.5		
NW Miramichi	22	CPUE		1993	8	26	15.8	6.8	36.9	12.8		3.7		16.6	7.1	38.4
NW Miramichi	22	CPUE		1994	8	10	86.0	37.0	199.6	17.9		6.8		24.7	10.7	57.4
NW Miramichi	23	Zippin	5	1970	9	2	9.2	9.1	9.3	10.0	0.0	20.0	n.a.	30.1		

Appendix 1 (cont'd). Atlantic salmon density estimates and 95% confidence intervals for 1970-2004.

River	Site	Estimator	Removal Sweeps	Year	Month	Day	Density (fish per $100m^2$), variance, and/or upper and lower 95% CI									
							Age 0	lower	upper	Age 1	Var 1	Age 2+	Var 2+	Parr	lower	upper
NW Miramichi	23	Zippin	5	1971	8	25	9.7	9.6	9.8	6.8	0.0	6.4	0.0	13.1		
NW Miramichi	23	Zippin	5	1972	9	1	16.4	13.4	19.3	6.0	0.0	4.4	0.1	10.5		
NW Miramichi	23	Zippin	5	1973	8	17	34.0	n.a.	n.a.	6.2	0.0	2.4	0.0	8.6		
NW Miramichi	23	Zippin	5	1974	9	16	86.2	74.6	97.9	28.6	0.6	3.6	0.0	32.1		
NW Miramichi	23	Zippin	5	1975	7	3	0.5	n.a.	n.a.	52.8	n.a.	17.8	2651.7	70.6		
NW Miramichi	23	Zippin	5	1976	7	9	0.4	n.a.	n.a.	43.3	1.3	24.6	0.6	67.8		
NW Miramichi	23	Zippin	5	1977	7	25	46.8	41.9	51.7	24.9	1.3	19.4	0.6	44.3		
NW Miramichi	23	Zippin	5	1978	8	31	25.2	22.5	27.9	50.8	n.a.	17.2	0.2	68.0		
NW Miramichi	23	Zippin	5	1982	9	23	15.3	13.3	17.2	29.8	2.1	9.9	0.9	39.7		
NW Miramichi	23	Zippin	5	1983	10	7	49.5	44.1	54.9	18.8	1.0	18.8	0.3	37.5		
NW Miramichi	23	Zippin	4	1984	8	8	22.4	20.1	24.7	32.2	2.3	3.2	0.0	35.4		
NW Miramichi	23	Zippin	4	1985	7	2	0.8	n.a.	n.a.	22.3	0.6	15.6	0.6	38.0		
NW Miramichi	23	CPUE		1993	8	27	185.3	79.4	432.4	30.7		1.4		32.2	13.9	74.7
NW Miramichi	23	CPUE		1994	7	13	161.2	69.2	375.8	70.6		4.8		75.4	32.1	177.0
NW Miramichi	23	CPUE		1997	8	27	61.8	26.7	143.5	48.8		8.5		57.3	24.5	133.9
NW Miramichi	23	CPUE		1998	8	10	163.3	70.0	380.7	43.9		13.3		57.3	24.5	133.8
NW Miramichi	23	CPUE		1999	8	29	152.5	65.5	355.5	78.2		22.8		100.9	42.8	238.2
NW Miramichi	23	CPUE		2000	9	13	28.7	12.3	66.8	17.8		8.6		26.4	11.4	61.5
NW Miramichi	23	CPUE		2001	9	14	49.5	21.3	115.2	56.6		16.0		72.6	30.8	171.5
NW Miramichi	23	CPUE		2002	9	6	146.9	62.6	344.6	50.1		10.2		60.3	25.6	141.9
NW Miramichi	23	CPUE		2003	9	9	55.1	23.7	128.3	33.7		2.7		36.4	15.6	84.9
NW Miramichi	23	CPUE		2004	8	18	26.8	11.5	62.4	31.2		12.7		43.9	18.8	102.8
NW Miramichi	24	Zippin	5	1975	9	16	17.6	16.4	18.8	4.2	0.0	0.0	0.0	4.2		
NW Miramichi	24	Zippin	4	1976	8	26	52.3	n.a.	n.a.	0.7	0.0	0.0	0.0	0.7		
NW Miramichi	24	Zippin	5	1977	8	19	24.4	23.8	24.9	0.4	n.a.	0.0	0.0	0.4		
NW Miramichi	24	Zippin	5	1978	8	11	6.7	n.a.	n.a.	0.0	0.0	1.6	n.a.	1.6		
NW Miramichi	24	Zippin	5	1982	10	21	10.6	10.3	10.9	1.4	0.0	0.0	0.0	1.4		
NW Miramichi	24	Zippin	5	1983	10	3	23.6	23.3	23.9	1.3	n.a.	0.0	0.0	1.3		
NW Miramichi	24	Zippin	4	1984	8	2	9.7	7.5	11.9	2.3	0.0	0.0	0.0	2.3		
NW Miramichi	24	CPUE		1993	9	10	74.8	32.2	173.6	19.4		1.6		21.0	9.1	48.7
NW Miramichi	24	CPUE		1994	7	18	102.0	43.9	237.1	7.5		0.0		7.5	3.2	17.4
NW Miramichi	24	CPUE		1997	8	27	55.2	23.8	128.1	0.0		0.0		0.0	n.a.	n.a.
NW Miramichi	25	Zippin	5	1974	8	9	5.2	n.a.	n.a.	0.0	0.0	0.0	0.0	0.0		
NW Miramichi	26	Zippin	5	1974	8	17	12.8	10.8	14.9	2.5	-6.8	0.0	0.0	2.5		
NW Miramichi	26	Zippin	4	1975	7	2	0.0	n.a.	n.a.	0.0	0.0	0.0	0.0	0.0		
NW Miramichi	26	Zippin	5	1976	6	30	12.9	n.a.	n.a.	2.3	n.a.	0.3	n.a.	2.5		
NW Miramichi	26	Zippin	4	1977	7	18	0.3	n.a.	n.a.	0.7	-0.3	0.0	0.0	0.7		
NW Miramichi	26	Zippin	4	1978	6	28	3.3	n.a.	n.a.	0.0	0.0	0.0	0.0	0.0		
NW Miramichi	26	Zippin	4	1979	7	3	1.1	n.a.	n.a.	0.3	n.a.	0.0	0.0	0.3		
NW Miramichi	26	Zippin	5	1980	7	2	7.7	3.9	11.6	0.3	0.0	2.0	-1.0	2.4		
NW Miramichi	26	Zippin	5	1981	6	29	18.6	3.2	34.1	0.0	0.0	0.0	0.0	0.0		
NW Miramichi	26	Zippin	4	1982	7	5	0.4	n.a.	n.a.	1.1	0.0	1.1	0.0	2.2		
NW Miramichi	26	Zippin	5	1983	7	8	22.9	20.8	25.0	0.0	0.0	2.4	0.0	2.4		
NW Miramichi	26	Zippin	4	1984	7	19	2.4	2.3	2.5	1.2	0.0	0.0	0.0	1.2		
NW Miramichi	26	Zippin	4	1985	9	9	37.1	31.7	42.6	3.2	-2.3	0.0	0.0	3.2		
NW Miramichi	26	Zippin	4	1986	8	22	17.3	15.3	19.3	9.6	0.2	0.0	0.0	9.6		
NW Miramichi	26	CPUE		1993	8	20	12.0	5.2	28.0	23.5		0.0		23.5	10.1	54.5
NW Miramichi	26	CPUE		1994	7	27	11.3	4.8	26.4	15.3		1.2		16.6	7.1	38.4
NW Miramichi	26	CPUE		1997	8	26	41.6	17.9	96.5	9.0		0.0		9.0	3.9	21.0
NW Miramichi	26	CPUE		1998	8	21	10.4	4.5	24.3	9.3		0.0		9.3	4.0	21.6
NW Miramichi	26	CPUE		1999	8	26	61.5	26.5	142.6	21.3		6.2		27.4	11.8	63.7
NW Miramichi	26	CPUE		2000	9	5	65.6	28.1	152.8	10.5		0.0		10.5	4.5	24.5
NW Miramichi	26	CPUE		2001	9	7	23.0	9.9	53.5	18.7		0.0		18.7	8.1	43.5
NW Miramichi	26	CPUE		2002	9	3	24.0	10.3	55.9	4.1		0.0		4.1	1.7	9.7
NW Miramichi	26	CPUE		2003	8	29	37.8	16.2	88.0	15.3		1.9		17.2	7.4	40.1
NW Miramichi	26	CPUE		2004	8	17	68.4	29.4	159.6	11.8		8.4		20.2	8.7	47.1
NW Miramichi	27	Zippin	5	1974	8	17	6.0	n.a.	n.a.	3.6	n.a.	0.0	0.0	3.6		
NW Miramichi	27	Zippin	5	1975	7	4	0.0	n.a.	n.a.	0.4	n.a.	0.4	n.a.	0.9		
NW Miramichi	27	Zippin	5	1976	7	9	5.4	5.4	5.4	0.0	0.0	0.4	n.a.	0.4		
NW Miramichi	27	Zippin	5	1977	8	23	13.4	13.3	13.5	1.1	0.0	0.0	0.0	1.1		
NW Miramichi	27	Zippin	5	1978	7	7	20.8	17.4	24.1	2.8	0.0	0.0	0.0	2.8		
NW Miramichi	27	Zippin	5	1982	10	6	6.7	6.7	6.7	0.3	n.a.	0.0	0.0	0.3		
NW Miramichi	27	Zippin	5	1983	10	4	44.4	n.a.	n.a.	2.8	-2.0	0.0	0.0	2.8		
NW Miramichi	27	Zippin	4	1984	7	20	18.9	17.0	20.7	1.8	0.0	0.0	0.0	1.8		
NW Miramichi	27	CPUE		1993	8	26	19.3	8.3	44.9	9.6		0.0		9.6	4.1	22.4
NW Miramichi	27	CPUE		1994	8	11	18.3	7.9	42.6	23.4		0.0		23.4	10.1	54.3
NW Miramichi	28	Zippin	4	1974	8	10	1.0	n.a.	n.a.	0.7	0.0	0.2	0.0	0.9		

Appendix 1 (cont'd). Atlantic salmon density estimates and 95% confidence intervals for 1970-2004.

River	Site	Estimator	Removal Sweeps	Year	Month	Day	Density (fish per 100m^2), variance, and/or upper and lower 95% CI									
							Age 0	lower	upper	Age 1	Var 1	Age 2+	Var 2+	Parr	lower	upper
NW Miramichi	28	Zippin	5	1975	8	13	0.3	0.3	0.3	4.1	0.7	0.8	0.0	4.9		
NW Miramichi	28	Zippin	5	1976	8	23	3.2	2.4	3.9	0.4	n.a.	0.4	0.0	0.7		
NW Miramichi	28	Zippin	5	1977	8	31	6.0	n.a.	n.a.	4.9	n.a.	0.3	-0.1	5.2		
NW Miramichi	28	Zippin	5	1978	7	20	1.9	1.7	2.0	1.7	0.0	0.0	0.0	1.7		
NW Miramichi	28	Zippin	5	1979	7	22	1.9	-1.3	5.1	2.6	0.1	0.4	n.a.	3.0		
NW Miramichi	28	Zippin	5	1981	9	1	5.3	5.0	5.7	1.3	0.2	0.3	0.0	1.5		
NW Miramichi	28	Zippin	5	1982	8	23	3.3	2.7	3.9	12.0	n.a.	0.2	0.0	12.2		
NW Miramichi	28	Zippin	5	1983	8	16	13.5	13.1	13.9	3.6	0.0	0.5	0.0	4.1		
NW Miramichi	28	Zippin	4	1984	8	3	2.6	2.6	2.6	0.5	0.0	0.7	0.0	1.2		
NW Miramichi	28	CPUE		1993	8	26	50.9	22.0	118.1	9.0		2.6		11.5	5.0	26.9
NW Miramichi	28	CPUE		1994	7	22	44.5	19.2	103.1	3.7		0.0		3.7	1.6	8.8
NW Miramichi	29	Zippin	5	1974	8	27	8.1	7.5	8.7	2.1	-1.8	0.6	0.0	2.7		
NW Miramichi	29	Zippin	5	1975	8	14	21.1	18.7	23.5	12.2	0.4	1.4	-2.3	13.6		
NW Miramichi	29	Zippin	5	1976	8	5	7.3	7.3	7.4	6.6	0.0	1.3	0.0	7.9		
NW Miramichi	29	Zippin	5	1977	7	21	1.9	1.1	2.8	4.4	0.5	0.6	n.a.	5.0		
NW Miramichi	29	Zippin	5	1978	7	12	1.8	n.a.	n.a.	6.4	0.0	2.1	1.2	8.5		
NW Miramichi	29	Zippin	3	1982	10	13	1.3	1.2	1.4	10.7	0.6	2.5	0.0	13.2		
NW Miramichi	29	Zippin	4	1983	10	12	12.3	10.4	14.3	9.0	0.2	2.6	0.0	11.6		
NW Miramichi	29	Zippin	4	1984	8	13	4.1	4.1	4.1	5.5	0.0	0.0	0.0	5.5		
NW Miramichi	30	Zippin	4	1974	8	17	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3		
NW Miramichi	30	Zippin	5	1975	8	14	1.3	1.3	1.3	5.2	1.0	0.8	n.a.	6.0		
NW Miramichi	30	Zippin	5	1976	8	5	9.0	6.8	11.1	13.0	6.8	7.2	.	20.2		
NW Miramichi	30	Zippin	5	1977	7	21	2.2	2.2	2.2	2.2	0.0	0.5	0.0	2.7		
NW Miramichi	30	Zippin	5	1978	7	12	4.5	1.8	7.2	8.6	0.4	4.1	0.0	12.7		
NW Miramichi	30	Zippin	3	1982	10	13	2.8	n.a.	n.a.	12.1	2.4	3.5	1.5	15.6		
NW Miramichi	30	Zippin	4	1983	10	12	10.0	9.5	10.5	7.0	0.2	2.2	0.0	9.2		
NW Miramichi	30	Zippin	4	1984	8	13	1.7	1.4	2.0	3.5	-24.5	0.9	0.0	4.3		
NW Miramichi	30	CPUE		1993	8	25	55.5	23.9	128.8	11.9		3.5		15.4	6.6	35.7
NW Miramichi	30	CPUE		1994	8	11	39.1	16.9	90.8	41.1		2.7		43.8	18.8	102.1
NW Miramichi	30	CPUE		1995	9	15	86.5	37.3	201.0	11.9		1.2		13.1	5.6	30.3
NW Miramichi	30	CPUE		1997	8	26	70.1	30.2	162.7	20.0		1.1		21.1	9.1	48.9
NW Miramichi	30	CPUE		1998	8	10	54.8	23.6	127.1	42.3		3.6		45.9	19.7	107.1
NW Miramichi	30	CPUE		1999	8	20	139.0	59.7	323.7	25.0		1.5		26.4	11.4	61.4
NW Miramichi	30	CPUE		2000	8	30	118.9	50.8	278.4	38.8		7.4		46.3	19.8	108.3
NW Miramichi	30	CPUE		2001	9	7	84.1	36.0	196.3	53.2		8.1		61.3	26.1	144.2
NW Miramichi	30	CPUE		2002	9	3	137.5	58.6	322.4	29.4		1.5		30.9	13.2	71.9
NW Miramichi	30	CPUE		2003	8	25	58.7	25.2	136.8	40.6		1.2		41.8	17.9	97.8
NW Miramichi	30	CPUE		2004	8	17	134.7	57.4	315.7	17.1		10.2		27.3	11.7	63.6
NW Miramichi	31	Zippin	4	1974	8	29	24.6	20.8	28.3	16.9	1.3	0.3	0.0	17.2		
NW Miramichi	31	Zippin	5	1975	8	13	29.9	24.4	35.5	18.1	1.3	2.6	-1.8	20.6		
NW Miramichi	31	Zippin	5	1976	8	4	33.9	31.4	36.4	28.3	n.a.	4.5	3.8	32.8		
NW Miramichi	31	Zippin	5	1977	8	8	43.5	n.a.	n.a.	31.0	2.6	4.6	72.8	35.6		
NW Miramichi	31	Zippin	5	1978	7	31	24.5	n.a.	n.a.	9.5	0.0	9.5	2.3	18.9		
NW Miramichi	31	Zippin	5	1979	7	25	1.9	1.2	2.6	9.0	4.5	7.3	1.1	16.2		
NW Miramichi	31	Zippin	5	1980	7	28	6.0	n.a.	n.a.	2.7	n.a.	3.8	1486.7	6.5		
NW Miramichi	31	Zippin	5	1981	9	11	129.0	124.7	133.4	30.6	0.5	6.9	0.0	37.5		
NW Miramichi	31	Zippin	5	1982	9	1	68.8	67.0	70.7	49.5	n.a.	5.8	0.1	55.3		
NW Miramichi	31	Zippin	5	1983	7	28	30.6	27.3	33.9	31.1	3.5	5.7	1.1	36.8		
NW Miramichi	31	Zippin	4	1984	7	18	38.3	n.a.	n.a.	7.2	n.a.	1.1	0.0	8.4		
NW Miramichi	31	Zippin	4	1993	8	12	69.0	64.1	73.9	34.0		14.1		48.1	43.8	52.5
NW Miramichi	31	CPUE		1994	8	11	45.4	19.6	105.4	34.8		7.6		42.4	18.2	98.8
NW Miramichi	31	CPUE		1997	8	27	162.4	69.7	378.7	42.6		3.2		45.8	19.7	106.7
NW Miramichi	31	CPUE		1998	8	6	96.6	41.6	224.4	61.5		4.0		65.6	28.0	153.5
NW Miramichi	31	CPUE		1999	8	20	167.3	71.7	390.2	49.8		6.9		56.7	24.3	132.4
NW Miramichi	31	CPUE		2000	8	15	102.8	43.9	240.3	50.7		7.3		58.0	24.7	136.4
NW Miramichi	31	CPUE		2001	8	16	132.0	56.3	309.4	89.0		6.5		95.5	40.2	227.1
NW Miramichi	31	CPUE		2002	9	5	37.7	16.2	87.6	26.6		7.1		33.8	14.5	78.8
NW Miramichi	31	CPUE		2003	8	26	84.6	36.2	197.5	48.2		1.8		50.0	21.3	117.3
NW Miramichi	31	CPUE		2004	8	25	95.6	40.9	223.3	37.4		22.4		59.8	25.4	140.7
NW Miramichi	32	Zippin	5	1974	8	25	14.8	13.7	15.9	18.8	2.9	4.2	2.5	22.9		
NW Miramichi	32	CPUE		1993	8	25	62.0	26.7	143.8	35.6		5.4		41.0	17.6	95.3
NW Miramichi	32	CPUE		1994	8	11	78.0	33.6	181.1	46.2		4.2		50.3	21.6	117.4
NW Miramichi	32	CPUE		1995	9	14	43.6	18.8	101.0	17.8		3.1		20.9	9.0	48.6
NW Miramichi	33	Zippin	4	1974	8	22	13.3	4.4	22.1	29.0	25.7	1.4	-2.3	30.4		
NW Miramichi	33	Zippin	5	1975	8	28	25.8	22.7	28.8	28.4	1.3	12.6	0.2	40.9		
NW Miramichi	33	Zippin	5	1976	9	9	36.7	31.8	41.5	46.4	1.3	13.1	0.1	59.5		
NW Miramichi	33	Zippin	5	1977	8	23	21.9	12.3	31.4	47.2	0.1	19.5	0.1	66.7		

Appendix 1 (cont'd). Atlantic salmon density estimates and 95% confidence intervals for 1970-2004

River	Site	Estimator	Removal Sweeps	Year	Month	Day	Density (fish per 100m^2), variance, and/or upper and lower 95% CI									
							Age 0	lower	upper	Age 1	Var 1	Age 2+	Var 2+	Parr	lower	upper
NW Miramichi	28	Zippin	5	1975	8	13	0.3	0.3	0.3	4.1	0.7	0.8	0.0	4.9		
NW Miramichi	33	Zippin	5	1978	8	16	1.4	1.4	1.4	13.2	0.2	9.2	n.a.	22.4		
NW Miramichi	33	Zippin	5	1979	7	24	2.0	n.a.	n.a.	13.1	0.3	0.5	n.a.	13.5		
NW Miramichi	33	Zippin	5	1981	9	10	25.8	24.0	27.6	52.8	2.7	21.1	n.a.	73.9		
NW Miramichi	33	Zippin	5	1982	8	25	2.1	1.9	2.2	54.8	n.a.	10.6	0.3	65.4		
NW Miramichi	33	Zippin	5	1983	7	20	33.0	n.a.	n.a.	83.8	9.0	13.8	0.0	97.5		
NW Miramichi	33	Zippin	4	1984	8	22	89.1	n.a.	n.a.	42.1	n.a.	20.1	0.2	62.2		
NW Miramichi	33	Zippin	4	1985	9	12	52.1	47.9	56.3	68.2	2.1	8.4	0.7	76.6		
NW Miramichi	33	CPUE		1994	8	2	63.5	27.4	147.3	58.9		5.5		64.4	27.5	150.7
NW Miramichi	33	CPUE		1996	8	28	59.8	25.8	138.7	56.9		1.0		57.9	24.8	135.2
NW Miramichi	33	CPUE		1997	8	28	138.6	59.5	322.9	103.0		17.4		120.4	50.8	285.2
NW Miramichi	33	CPUE		1998	8	10	55.7	24.0	129.2	37.1		0.0		37.1	16.0	86.3
NW Miramichi	33	CPUE		1999	8	18	116.8	50.2	271.8	74.9		10.7		85.6	36.4	201.4
NW Miramichi	33	CPUE		2000	8	23	135.8	57.9	318.5	63.6		7.7		71.3	30.2	168.3
NW Miramichi	33	CPUE		2001	8	15	99.9	42.7	233.5	71.5		4.1		75.6	32.0	178.7
NW Miramichi	33	CPUE		2002	9	5	50.8	21.8	118.3	41.6		2.8		44.3	18.9	103.8
NW Miramichi	33	CPUE		2003	8	29	71.0	30.4	165.5	76.9		12.5		89.4	37.7	212.1
NW Miramichi	33	CPUE		2004	8	25	54.0	23.2	125.9	43.1		33.1		76.2	32.2	180.1
NW Miramichi	34	Zippin	4	1974	8	19	11.1	n.a.	n.a.	33.7	n.a.	0.5	n.a.	34.2		
NW Miramichi	34	Zippin	5	1975	9	8	30.0	n.a.	n.a.	32.0	n.a.	15.2	n.a.	47.2		
NW Miramichi	34	Zippin	5	1977	9	1	20.4	n.a.	n.a.	40.2	2.5	18.6	0.2	58.7		
NW Miramichi	34	Zippin	5	1978	7	31	10.6	9.8	11.4	49.6	n.a.	14.6	n.a.	64.2		
NW Miramichi	34	Zippin	5	1979	7	4	1.5	n.a.	n.a.	16.8	5.2	9.3	2.7	26.1		
NW Miramichi	34	Zippin	5	1980	8	26	9.7	8.6	10.9	20.2	0.2	4.2	0.1	24.5		
NW Miramichi	34	Zippin	5	1981	8	27	40.9	39.8	42.0	35.6	0.6	12.6	0.5	48.2		
NW Miramichi	34	Zippin	5	1982	8	19	32.5	31.3	33.6	34.1	n.a.	3.5	0.1	37.5		
NW Miramichi	34	Zippin	5	1983	7	27	107.6	85.8	129.3	88.9	n.a.	20.4	0.5	109.4		
NW Miramichi	34	Zippin	4	1984	7	25	34.8	n.a.	n.a.	26.1	n.a.	3.9	0.0	29.9		
NW Miramichi	34	Zippin	4	1985	9	6	41.4	34.4	48.3	15.7	0.5	1.8	-2.7	17.4		
NW Miramichi	34	Zippin	4	1993	8	17	238.0	39.4	436.7	12.8		0.0		12.8	n.a.	n.a.
NW Miramichi	34	CPUE		1994	8	2	125.9	54.1	293.1	10.2		0.0		10.2	4.4	23.7
NW Miramichi	34	CPUE		1995	9	14	95.6	41.1	222.0	59.4		5.6		65.0	27.8	152.0
NW Miramichi	34	CPUE		1996	8	28	154.0	66.1	359.0	79.8		11.8		91.6	38.9	215.8
NW Miramichi	34	CPUE		1997	9	19	80.7	34.7	187.3	73.1		14.0		87.1	37.0	205.0
NW Miramichi	34	CPUE		1998	8	5	126.2	54.2	293.6	29.8		2.0		31.8	13.7	73.9
NW Miramichi	34	CPUE		1999	8	30	140.3	60.3	326.8	64.2		19.7		83.9	35.7	197.2
NW Miramichi	34	CPUE		2000	8	22	193.7	82.3	456.2	77.7		14.6		92.3	38.9	219.3
NW Miramichi	34	CPUE		2001	8	13	93.7	40.1	219.1	81.0		11.1		92.1	38.8	218.7
NW Miramichi	34	CPUE		2003	9	2	111.5	47.6	260.9	51.7		9.2		60.9	25.9	143.2
NW Miramichi	35	Zippin	5	1974	8	19	122.2	118.2	126.3	32.0	1.5	1.1	0.0	33.1		
NW Miramichi	35	Zippin	5	1975	9	10	8.9	8.1	9.8	18.6	0.3	8.0	0.0	26.5		
NW Miramichi	35	Zippin	5	1976	7	28	15.8	14.8	16.8	4.4	0.1	1.0	-0.3	5.4		
NW Miramichi	35	Zippin	5	1977	7	26	10.7	n.a.	n.a.	23.2	1.2	1.9	-1.7	25.1		
NW Miramichi	35	Zippin	5	1978	7	27	21.7	16.3	27.1	14.3	0.7	2.5	-12.1	16.7		
NW Miramichi	35	Zippin	5	1982	10	18	39.4	35.9	42.8	30.3	0.5	4.1	0.6	34.3		
NW Miramichi	35	Zippin	5	1983	9	28	159.9	156.8	162.9	172.2	0.4	12.4	0.0	184.6		
NW Miramichi	35	Zippin	4	1984	8	16	27.4	25.1	29.8	19.7	4.7	3.5	n.a.	23.3		
NW Miramichi	35	Zippin	4	1986	8	21	225.9	202.0	249.7	93.9	11.5	23.7	6.7	117.5		
NW Miramichi	35	CPUE		1994	8	2	191.0	81.8	445.9	61.7		9.0		70.7	30.2	165.6
NW Miramichi	35	CPUE		1996	8	28	170.2	73.0	396.9	47.7		0.0		47.7	20.5	111.1
NW Miramichi	35	CPUE		1997	9	19	217.5	93.0	508.4	86.1		15.5		101.7	43.1	239.9
NW Miramichi	35	CPUE		1998	8	5	100.0	43.0	232.4	40.1		3.9		44.0	18.9	102.5
NW Miramichi	35	CPUE		1999	8	18	306.6	130.6	719.3	93.3		22.3		115.5	48.8	273.5
NW Miramichi	35	CPUE		2000	8	22	323.1	136.2	766.5	56.5		7.7		64.2	27.3	151.3
NW Miramichi	35	CPUE		2001	8	13	130.9	55.8	306.8	74.1		6.4		80.5	34.0	190.6
NW Miramichi	35	CPUE		2002	9	5	117.9	50.3	276.0	58.1		8.4		66.5	28.2	156.7
NW Miramichi	35	CPUE		2003	9	2	39.2	16.8	91.2	100.0		10.2		110.2	46.2	262.9
NW Miramichi	35	CPUE		2004	8	25	175.4	74.6	412.5	25.6		34.9		60.5	25.7	142.4
NW Miramichi	36	Zippin	5	1974	8	19	51.2	45.0	57.4	51.5	5.9	3.6	n.a.	55.2		
NW Miramichi	36	Zippin	5	1975	8	26	99.0	88.2	109.7	32.2	1.3	12.9	0.1	45.1		
NW Miramichi	36	Zippin	5	1976	7	28	65.5	n.a.	n.a.	58.4	14.5	12.3	1.7	70.7		
NW Miramichi	36	Zippin	5	1977	7	19	42.3	36.0	48.6	54.8	n.a.	12.0	n.a.	66.8		
NW Miramichi	36	Zippin	5	1978	7	27	11.5	n.a.	n.a.	32.1	n.a.	13.7	0.3	45.7		
NW Miramichi	36	Zippin	5	1979	7	12	5.7	3.5	7.8	30.7	0.5	11.6	n.a.	42.3		
NW Miramichi	36	Zippin	5	1980	7	17	7.9	6.2	9.6	41.3	1.1	7.4	0.0	48.7		
NW Miramichi	36	Zippin	5	1981	8	27	82.0	79.3	84.8	69.2	2.1	14.0	2.1	83.2		
NW Miramichi	36	Zippin	5	1982	8	19	23.2	22.1	24.4	36.8	0.3	7.9	0.3	44.7		
NW Miramichi	36	Zippin	5	1983	7	27	51.3	48.4	54.1	66.6	3.5	11.1	0.6	77.7		

Appendix 1 (cont'd). Atlantic salmon density estimates and 95% confidence intervals for 1970-2004.

River	Site	Estimator	Removal Sweeps	Year	Month	Day	Density (fish per 100m²), variance, and/or upper and lower 95% CI									
							Age 0	lower	upper	Age 1	Var 1	Age 2+	Var 2+	Parr	lower	upper
NW Miramichi	36	Zippin	4	1984	8	22	116.8	104.3	129.3	60.3	4.4	9.6	0.0	69.9		
NW Miramichi	36	Zippin	4	1985	9	5	142.2	125.9	158.5	61.7	9.6	10.4	.	72.1		
NW Miramichi	36	Zippin	4	1986	8	19	146.9	131.8	161.9	60.8	12.0	19.2	17.8	80.0		
NW Miramichi	40	Zippin	5	1970	8	21	17.0	15.8	18.1	9.6	0.0	8.7	0.0	18.3		
NW Miramichi	40	Zippin	5	1971	7	15	15.8	11.2	20.4	9.6	0.0	2.4	0.0	12.0		
NW Miramichi	40	Zippin	5	1972	9	13	2.8	2.8	2.8	7.1	0.0	1.3	0.0	8.4		
NW Miramichi	40	Zippin	5	1973	8	22	24.7	20.9	28.5	5.8	0.7	3.5	0.0	9.3		
NW Miramichi	40	Zippin	5	1974	7	16	0.5	0.5	0.6	6.9	-301.9	0.9	-0.2	7.7		
NW Miramichi	40	Zippin	5	1975	7	18	59.6	55.3	63.9	3.5	n.a.	2.2	-3.9	5.6		
NW Miramichi	40	Zippin	5	1976	8	4	14.6	14.3	14.9	5.3	0.0	1.0	0.0	6.3		
NW Miramichi	40	Zippin	5	1977	8	5	50.6	49.2	52.0	6.4	0.0	4.0	2.1	10.4		
NW Miramichi	40	Zippin	5	1978	7	6	16.9	14.5	19.3	3.1	0.0	1.5	-6.2	4.6		
NW Miramichi	40	Zippin	5	1979	7	9	9.0	4.8	13.1	6.2	0.1	0.8	0.0	7.0		
NW Miramichi	40	Zippin	5	1980	7	3	6.7	5.1	8.3	5.1	0.8	2.7	-2.8	7.7		
NW Miramichi	40	Zippin	5	1981	7	3	18.2	15.1	21.3	3.0	-7.5	0.9	0.0	3.9		
NW Miramichi	40	Zippin	5	1982	7	16	7.4	6.1	8.7	8.6	4.7	0.3	0.0	8.9		
NW Miramichi	40	Zippin	5	1983	7	14	25.4	23.5	27.2	8.8	0.1	6.9	0.1	15.7		
NW Miramichi	40	Zippin	4	1984	7	5	4.1	n.a.	n.a.	18.1	118.0	0.0	0.0	18.1		
NW Miramichi	40	Zippin	4	1985	7	22	0.0	n.a.	n.a.	0.4	n.a.	0.8	n.a.	1.1		
NW Miramichi	40	Zippin	4	1986	7	8	0.0	n.a.	n.a.	3.1	3.0	0.8	-0.5	3.9		
NW Miramichi	40	Zippin	4	1987	7	17	3.0	n.a.	n.a.	7.6	16.3	5.7	0.8	13.2		
NW Miramichi	40	Zippin	4	1988	7	6	52.0	49.4	54.6	3.5	0.8	1.1	0.0	4.6		
NW Miramichi	40	Zippin	3	1989	6	30	61.1	45.1	77.2	21.2	19.4	1.8	0.0	23.0		
NW Miramichi	40	Zippin	4	1990	7	6	2.7	2.5	2.9	20.6	3.4	7.8	3.3	28.4		
NW Miramichi	40	Zippin	3	1991	8	5	24.2	n.a.	n.a.	14.7	8.7	19.1	0.9	33.8		
NW Miramichi	40	Zippin	3	1992	7	9	63.4	n.a.	n.a.	8.3	-7.8	3.7	n.a.	12.0		
NW Miramichi	40	Zippin	4	1993	7	14	61.1	58.7	63.5	40.1		5.6		45.7	12.8	78.6
NW Miramichi	40	Zippin	3	1994	7	20	65.5	3.3	127.6	32.7		13.3		46.1	38.5	53.6
NW Miramichi	40	Zippin	3	1995	9	12	25.4	-15.1	65.9	27.3		13.0		40.3	n.a.	n.a.
NW Miramichi	40	Zippin	3	1996	8	30	43.6	41.8	45.4	13.3		2.4		15.8	15.4	16.2
NW Miramichi	40	Zippin	3	1997	8	28	14.0	12.3	15.7	21.4		4.8		26.2	23.2	29.2
NW Miramichi	40	Zippin	3	1998	8	7	48.6	40.1	57.1	11.3		8.4		19.7	15.1	24.3
NW Miramichi	40	Zippin	3	1999	8	25	69.5	64.4	74.6	28.4		9.7		38.1	28.9	47.3
NW Miramichi	40	Zippin	3	2000	9	1	203.6	198.3	208.9	5.7		7.3		13.1	n.a.	n.a.
NW Miramichi	40	Zippin	3	2001	8	13	0.5	n.a.	n.a.	44.4		5.9		50.3	35.8	64.8
NW Miramichi	40	Zippin	3	2002	8	28	101.0	93.1	108.9	5.6		18.2		23.9	9.9	37.8
NW Miramichi	40	Zippin	3	2003	9	3	57.7	52.9	62.4	26.9		5.4		32.3	28.8	35.8
NW Miramichi	40	Zippin	4	2004	8	27	26.7	23.6	29.7	15.7		8.6		24.3	23.0	25.6
NW Miramichi	41	Zippin	5	1970	8	20	0.6	0.6	0.6	3.4	0.0	5.2	0.0	8.6		
NW Miramichi	41	Zippin	5	1971	6	29	10.4	6.7	14.1	1.4	n.a.	1.9	0.0	3.3		
NW Miramichi	41	Zippin	5	1972	9	11	1.2	1.2	1.2	2.0	0.0	0.8	0.0	2.7		
NW Miramichi	41	Zippin	5	1973	8	17	5.3	n.a.	n.a.	0.3	n.a.	0.3	n.a.	0.6		
NW Miramichi	41	Zippin	4	1974	7	29	0.9	n.a.	n.a.	2.4	n.a.	0.0	0.0	2.4		
NW Miramichi	41	Zippin	5	1975	7	14	29.1	27.1	31.0	1.4	0.0	0.9	0.0	2.3		
NW Miramichi	41	Zippin	5	1976	7	6	3.1	n.a.	n.a.	3.4	0.0	0.3	n.a.	3.7		
NW Miramichi	41	Zippin	5	1977	7	25	22.0	16.7	27.3	2.0	0.2	1.7	0.0	3.7		
NW Miramichi	41	Zippin	5	1978	7	6	15.1	11.2	19.0	4.7	0.0	0.3	n.a.	5.0		
NW Miramichi	41	Zippin	5	1980	7	7	14.9	10.9	19.0	3.3	0.1	1.4	0.0	4.7		
NW Miramichi	41	Zippin	5	1981	7	1	13.9	10.4	17.4	5.4	0.0	0.6	-0.3	6.1		
NW Miramichi	41	Zippin	5	1982	8	31	12.8	n.a.	n.a.	9.3	0.3	1.5	0.0	10.8		
NW Miramichi	41	Zippin	5	1983	7	19	2.7	2.3	3.0	3.7	0.0	2.9	0.0	6.6		
NW Miramichi	41	Zippin	4	1984	8	17	7.3	7.2	7.3	2.2	n.a.	2.2	0.0	4.3		
NW Miramichi	41	Zippin	3	1985	7	3	0.0	n.a.	n.a.	1.4	n.a.	0.5	n.a.	1.9		
NW Miramichi	41	CPUE		1993	8	20	21.2	9.1	49.2	26.1		2.6		28.7	12.4	66.7
NW Miramichi	41	CPUE		1994	7	20	23.4	10.1	54.3	7.6		0.0		7.6	3.2	17.7
NW Miramichi	41	CPUE		1996	8	27	40.2	17.3	93.2	7.8		0.0		7.8	3.3	18.1
NW Miramichi	41	CPUE		1999	9	3	15.5	6.7	36.0	9.9		5.6		15.5	6.7	35.9
NW Miramichi	41	CPUE		2000	9	13	40.4	17.4	94.1	8.1		2.3		10.5	4.5	24.4
NW Miramichi	42	Zippin	5	1970	8	19	0.3	n.a.	n.a.	2.2	0.0	4.9	0.0	7.0		
NW Miramichi	42	Zippin	5	1971	6	30	0.9	n.a.	n.a.	3.3	-39.1	2.7	0.0	6.1		
NW Miramichi	42	Zippin	5	1972	9	12	0.6	0.5	0.7	2.6	0.0	1.4	0.0	4.0		
NW Miramichi	42	Zippin	5	1973	9	7	13.8	12.1	15.5	0.3	n.a.	0.6	0.0	0.9		
NW Miramichi	42	Zippin	5	1974	8	26	1.3	1.3	1.3	3.1	0.6	1.7	-0.6	7.8		
NW Miramichi	42	Zippin	5	1975	8	25	26.4	24.6	28.2	3.1	0.0	1.5	n.a.	4.6		
NW Miramichi	42	Zippin	5	1976	9	9	5.2	n.a.	n.a.	3.6	0.0	1.5	0.0	5.0		
NW Miramichi	42	Zippin	5	1977	8	18	31.9	30.0	33.7	6.8	n.a.	1.9	n.a.	8.7		
NW Miramichi	42	Zippin	5	1978	7	7	22.2	17.9	26.5	0.9	-0.6	7.8	1.3	8.7		

Appendix 1 (cont'd). Atlantic salmon density estimates and 95% confidence intervals for 1970-2004.

							Density (fish per 100m²), variance, and/or upper and lower 95% CI										
River	Site	Estimator	Removal Sweeps	Year	Month	Day	Age 0	lower	upper	Age 1	Var 1	Age 2+	Var 2+	Parr	lower	upper
NW Miramichi	36	Zippin	4	1984	8	22	116.8	104.3	129.3	60.3	4.4	9.6	0.0	69.9		
NW Miramichi	36	Zippin	4	1985	9	5	142.2	125.9	158.5	61.7	9.6	10.4	.	72.1		
NW Miramichi	36	Zippin	4	1986	8	19	146.9	131.8	161.9	60.8	12.0	19.2	17.8	80.0		
NW Miramichi	40	Zippin	5	1970	8	21	17.0	15.8	18.1	9.6	0.0	8.7	0.0	18.3		
NW Miramichi	40	Zippin	5	1971	7	15	15.8	11.2	20.4	9.6	0.0	2.4	0.0	12.0		
NW Miramichi	42	CPUE		1993	8	19	101.0	43.4	234.7	24.2		0.0		24.2	10.4	56.0
NW Miramichi	109	CPUE		1994	8	2	146.1	62.7	340.4	16.7		1.4		18.1	7.8	42.0
NW Miramichi	109	CPUE		1996	8	28	280.3	119.6	657.0	40.7		5.8		46.5	20.0	108.3
NW Miramichi	109	CPUE		1997	9	12	292.7	124.8	686.5	58.9		3.0		61.8	26.4	144.6
NW Miramichi	115	CPUE		1994	8	11	21.5	9.2	49.9	32.6		6.5		39.1	16.8	91.0
NW Miramichi	115	CPUE		1995	9	14	191.6	82.1	447.4	23.3		1.6		24.9	10.7	57.8
NW Miramichi	115	CPUE		1996	9	3	42.8	18.4	99.2	35.8		7.4		43.1	18.5	100.4
NW Miramichi	115	CPUE		1997	9	15	26.7	11.5	62.0	16.0		2.0		18.0	7.8	41.8
NW Miramichi	115	CPUE		1998	8	6	31.7	13.7	73.6	37.9		1.2		39.0	16.8	90.8
NW Miramichi	115	CPUE		1999	9	8	65.7	28.3	152.4	44.5		3.8		48.3	20.7	112.6
NW Miramichi	115	CPUE		2000	8	23	74.5	31.9	173.9	72.2		7.4		79.6	33.7	188.4
NW Miramichi	115	CPUE		2001	8	14	76.4	32.7	178.2	49.0		5.0		54.0	23.0	126.7
NW Miramichi	115	CPUE		2002	8	26	53.6	23.0	124.9	51.6		5.8		57.4	24.4	134.9
NW Miramichi	115	CPUE		2003	8	25	55.7	23.9	129.7	45.5		5.8		51.4	21.9	120.6
NW Miramichi	115	CPUE		2004	8	18	63.3	27.1	147.4	24.4		23.1		47.5	20.3	111.3
NW Miramichi	143	CPUE		1994	8	2	41.1	17.7	95.2	13.9		0.0		13.9	6.0	32.2
NW Miramichi	153	CPUE		1996	8	29	64.0	27.6	148.4	20.7		6.9		27.5	11.9	63.9
NW Miramichi	153	CPUE		1997	8	25	172.1	73.8	401.3	43.8		5.0		48.8	20.9	113.8
NW Miramichi	191	CPUE		1998	9	3	14.5	6.2	33.7	0.0		0.0		0.0	n.a.	n.a.
NW Miramichi	191	CPUE		1999	8	30	0.0	n.a.	n.a.	13.8		11.3		25.1	10.8	58.3
NW Miramichi	191	CPUE		2000	9	8	0.0	n.a.	n.a.	4.0		3.2		7.3	3.1	17.0
NW Miramichi	191	CPUE		2001	9	14	0.0	n.a.	n.a.	2.3		1.8		4.1	1.7	9.6
NW Miramichi	191	CPUE		2002	8	26	0.0	n.a.	n.a.	0.0		0.0		0.0	n.a.	n.a.
Trout Bk	191	CPUE		2003	8	28	0.0	n.a.	n.a.	6.3		0.0		6.3	2.7	14.8
Trout Bk	191	CPUE		2004	9	8	7.1	3.0	16.6	0.0		0.0		0.0	n.a.	n.a.
NW Miramichi	201	CPUE		1998	8	5	164.2	70.4	382.9	27.3		3.0		30.3	13.1	70.4
NW Miramichi	201	CPUE		1999	8	30	183.2	78.5	427.6	89.6		18.1		107.7	45.6	254.4
NW Miramichi	201	CPUE		2000	9	5	109.8	46.9	257.0	54.5		7.6		62.1	26.4	146.2
NW Miramichi	201	CPUE		2001	9	7	157.6	67.1	370.1	66.7		10.1		76.8	32.5	181.7
NW Miramichi	201	CPUE		2002	9	10	107.4	45.9	251.4	66.1		8.3		74.5	31.5	175.9
NW Miramichi	201	CPUE		2004	8	25	149.7	63.8	351.4	37.9		8.4		46.3	19.8	108.4
NW Miramichi	215	CPUE		1996	9	3	76.6	33.0	177.8	41.6		3.9		45.4	19.5	105.9
NW Miramichi	215	CPUE		1997	8	27	50.0	21.5	115.9	19.6		3.5		23.1	10.0	53.6
NW Miramichi	215	CPUE		1999	9	16	79.7	34.3	185.0	69.2		5.3		74.4	31.7	174.7
NW Miramichi	215	CPUE		2000	8	22	97.4	41.7	227.7	43.6		4.3		47.9	20.4	112.2
NW Miramichi	215	CPUE		2001	9	7	91.6	39.2	213.9	71.6		7.7		79.3	33.5	187.5
NW Miramichi	215	CPUE		2002	9	10	107.5	46.0	251.5	32.3		2.9		35.2	15.1	82.2
NW Miramichi	215	CPUE		2003	8	26	58.5	25.1	136.4	36.5		1.3		37.8	16.2	88.3
NW Miramichi	215	CPUE		2004	8	17	82.4	35.3	192.4	42.1		8.0		50.1	21.4	117.4
NW Miramichi	216	CPUE		1999	9	9	43.6	18.8	101.0	9.4		0.0		9.4	4.0	21.9
NW Miramichi	216	CPUE		2000	9	15	57.3	24.6	133.5	6.1		0.0		6.1	2.6	14.4
NW Miramichi	216	CPUE		2001	9	7	96.8	41.4	226.2	6.6		0.0		6.6	2.8	15.5
NW Miramichi	216	CPUE		2002	9	5	53.6	23.0	124.9	0.0		0.0		0.0	n.a.	n.a.
NW Miramichi	216	CPUE		2003	9	2	14.9	6.4	34.8	3.7		0.0		3.7	1.6	8.8
NW Miramichi	216	CPUE		2004	8	17	60.1	25.8	140.0	0.0		0.0		0.0	n.a.	n.a.
Sevogle	37	Zippin	5	1974	9	16	34.2	32.3	36.0	2.9	0.1	0.0	0.0	2.9		
Sevogle	37	Zippin	5	1975	8	25	49.0	45.6	52.5	3.6	0.0	0.0	0.0	3.6		
Sevogle	37	Zippin	5	1976	8	27	17.2	15.3	19.1	2.6	n.a.	1.0	0.0	3.6		
Sevogle	37	Zippin	5	1977	8	22	55.2	n.a.	n.a.	1.3	0.0	1.3	0.0	2.6		
Sevogle	37	Zippin	5	1978	7	26	1.9	1.9	1.9	1.0	0.0	0.0	0.0	1.0		
Sevogle	37	Zippin	5	1979	9	26	8.1	4.4	11.8	0.7	n.a.	0.4	n.a.	1.1		
Sevogle	37	Zippin	4	1980	9	16	8.5	n.a.	n.a.	0.0	0.0	0.0	0.0	0.0		
Sevogle	37	Zippin	5	1981	8	28	16.2	14.1	18.4	0.4	n.a.	0.4	0.0	0.7		
Sevogle	37	Zippin	5	1982	9	27	7.2	-4.8	19.2	4.9	0.0	0.0	0.0	4.9		
Sevogle	37	Zippin	5	1983	7	21	35.7	34.4	37.0	9.0	0.4	1.4	0.0	10.5		
Sevogle	37	Zippin	4	1984	8	14	16.5	12.4	20.6	4.4	-9.8	2.4	0.0	6.8		
Sevogle	37	CPUE		1993	8	25	37.3	16.1	86.6	12.8		0.0		12.8	5.5	29.7
Sevogle	37	CPUE		1995	9	15	39.1	16.9	90.7	10.9		1.6		12.5	5.4	28.9
Sevogle	38	Zippin	5	1974	9	6	45.9	41.6	50.2	51.1	1.5	6.6	0.3	57.7		
Sevogle	38	Zippin	4	1975	7	30	36.6	22.0	51.1	21.0	n.a.	8.2	0.5	29.3		
Sevogle	38	Zippin	5	1976	7	19	8.0	7.2	8.9	26.1	5.4	9.1	2.4	35.2		
Sevogle	38	Zippin	5	1977	7	26	53.8	50.8	56.7	12.3	0.0	7.7	n.a.	20.0		
Sevogle	38	Zippin	5	1978	8	2	27.6	25.0	30.2	63.1	1.8	10.1	0.0	73.2		
Sevogle	38	Zippin	5	1979	7	27	11.1	9.0	13.2	27.3	0.7	9.6	2.8	36.9		
Sevogle	38	Zippin	5	1980	7	18	7.7	5.7	9.7	10.5	0.3	4.2	44.6	14.7		
Sevogle	38	Zippin	5	1981	8	28	80.6	77.3	83.8	24.1	0.9	13.6	0.4	37.6		
Sevogle	38	Zippin	5	1982	8	20	7.2	6.9	7.6	19.9	0.5	5.0	0.1	24.9		

Appendix 1 (cont'd). Atlantic salmon density estimates and 95% confidence intervals for 1970-2004.

River	Site	Estimator	Removal Sweeps	Year	Month	Day	Density (fish per $100m^2$), variance, and/or upper and lower 95% CI									
							Age 0	lower	upper	Age 1	Var 1	Age 2+	Var 2+	Parr	lower	upper
Sevogle	38	Zippin	4	1983	7	7	27.5	n.a.	n.a.	19.1	2.4	16.7	0.3	35.7		
Sevogle	38	Zippin	4	1984	7	18	26.8	n.a.	n.a.	34.5	2.1	7.9	0.2	42.4		
Sevogle	38	Zippin	4	1993	8	23	87.6	82.6	92.6	42.4		13.2		55.6	51.4	59.8
Sevogle	38	CPUE		1994	7	22	123.3	53.0	286.8	35.6		3.1		38.7	16.6	89.9
Sevogle	38	Zippin	3	1995	9	13	80.0	66.7	93.4	71.9		18.0		89.9	42.2	137.5
Sevogle	38	CPUE		1996	8	28	67.5	29.1	156.7	32.7		1.9		34.7	14.9	80.6
Sevogle	38	CPUE		1997	8	27	75.1	32.3	174.3	32.7		3.9		36.5	15.7	84.9
Sevogle	38	Zippin	3	1998	9	3	59.9	51.1	68.6	47.4		9.8		57.2	54.6	59.9
Sevogle	38	Zippin	4	1999	8	17	209.9	144.6	275.2	47.1		18.1		65.2	53.9	76.5
Sevogle	38	Zippin	3	2000	8	31	159.8	152.3	167.3	50.8		21.1		71.9	59.0	84.8
Sevogle	38	Zippin	3	2001	8	24	56.7	51.0	62.4	64.5		22.6		87.1	73.4	100.8
Sevogle	38	Zippin	3	2002	8	27	81.6	76.0	87.2	38.1		21.9		60.1	52.6	67.5
Sevogle	38	CPUE		2003	9	2	39.0	16.8	90.8	37.5		8.1		45.6	19.5	106.7
Sevogle	38	CPUE		2004	9	1	93.3	39.9	217.9	12.6		23.5		36.1	15.5	84.3
Sevogle	39	Zippin	5	1974	9	17	30.4	29.2	31.6	43.3	n.a.	7.2	742.3	50.6		
Sevogle	39	Zippin	5	1975	8	15	44.1	38.2	50.1	13.2	n.a.	11.0	n.a.	24.2		
Sevogle	39	Zippin	5	1976	9	7	42.4	39.9	44.8	11.8	3.3	9.5	6.2	21.2		
Sevogle	39	Zippin	5	1977	8	3	24.9	18.8	31.1	15.7	1.0	4.1	0.0	19.8		
Sevogle	39	Zippin	4	1978	7	26	9.3	6.5	12.0	20.3	2.0	7.7	0.4	28.0		
Sevogle	39	Zippin	5	1979	9	27	25.9	24.6	27.2	8.7	1.5	4.3	0.0	13.0		
Sevogle	39	Zippin	5	1980	9	15	21.8	19.3	24.3	8.3	0.0	2.5	0.0	10.8		
Sevogle	39	Zippin	5	1981	8	24	78.4	71.7	85.0	8.7	22.8	4.3	0.1	13.0		
Sevogle	39	Zippin	5	1982	7	15	2.7	n.a.	n.a.	18.4	0.3	1.6	0.0	20.0		
Sevogle	39	Zippin	5	1983	7	12	30.7	n.a.	n.a.	27.9	7.5	12.9	1.9	40.7		
Sevogle	39	Zippin	4	1984	7	30	19.5	14.1	25.0	25.6	7.1	3.5	-6.5	29.1		
Sevogle	39	CPUE		1993	8	19	108.9	46.8	253.1	14.9		1.9		16.7	7.2	38.8
Sevogle	39	CPUE		1994	7	21	191.6	82.1	447.3	9.8		0.0		9.8	4.2	22.7
Sevogle	39	CPUE		1996	8	29	111.5	48.0	259.3	49.0		0.0		49.0	21.0	114.4
Sevogle	39	CPUE		1997	8	29	150.1	64.4	349.7	51.0		4.7		55.7	23.8	130.0
Sevogle	39	CPUE		1998	8	5	60.4	26.0	140.1	11.7		3.4		15.1	6.5	35.1
Sevogle	39	CPUE		1999	9	3	115.0	49.5	267.5	45.8		7.6		53.3	22.9	124.5
Sevogle	39	CPUE		2000	9	12	135.0	57.6	316.6	48.6		6.6		55.2	23.5	129.6
Sevogle	39	CPUE		2001	9	14	122.2	52.2	286.3	40.5		4.4		44.9	19.2	105.1
Sevogle	39	CPUE		2002	9	4	0.0	n.a.	n.a.	59.3		4.3		63.6	27.0	149.8
Sevogle	39	CPUE		2003	9	8	0.0	n.a.	n.a.	24.9		5.8		30.7	13.2	71.6
Sevogle	39	CPUE		2004	8	26	159.4	67.9	374.5	10.8		10.8		21.6	9.3	50.2
Sevogle	103	Zippin	3	1994	7	21	49.4	45.8	53.0	24.0		5.4		29.4	-4.9	63.7
Sevogle	103	Zippin	3	1995	8	23	164.4	157.4	171.4	25.4		9.0		34.3	13.1	55.6
Sevogle	103	Zippin	3	1996	8	27	157.7	151.7	163.8	0.7		5.4		6.4	2.7	15.1
Sevogle	103	Zippin	3	1997	8	27	62.6	55.8	69.4	15.4		3.6		19.0	0.5	37.5
Sevogle	103	Zippin	4	1998	8	4	36.7	33.3	40.0	9.6		3.2		12.8	7.7	17.9
Sevogle	103	Zippin	3	1999	8	27	65.6	1.0	130.1	36.7		10.2		46.9	38.7	55.0
Sevogle	103	Zippin	3	2000	8	31	11.3	10.0	12.6	6.5		4.0		10.4	n.a.	n.a.
Sevogle	103	Zippin	3	2001	8	20	62.9	40.9	84.9	17.6		3.9		21.5	17.7	25.3
Sevogle	103	Zippin	3	2002	8	28	1.0	0.7	1.3	18.7		3.9		22.7	18.9	26.5
Sevogle	103	Zippin	4	2003	9	9	10.6	10.1	11.0	9.4		4.9		14.2	13.8	14.7
Sevogle	103	Zippin	4	2004	9	8	6.4	3.5	9.3	15.6		5.6		21.2	11.1	31.2
Sevogle	104	CPUE		1994	7	22	34.6	14.9	80.3	31.9		8.8		40.7	17.5	94.7
Sevogle	104	CPUE		1997	10	1	57.7	24.9	133.6	20.9		0.0		20.9	9.0	48.6
Sevogle	104	CPUE		1998	8	10	9.7	4.2	22.7	9.6		2.1		11.7	5.1	27.3
Sevogle	104	CPUE		1999	8	30	85.1	36.6	197.6	65.6		7.3		73.0	31.1	171.1
Sevogle	104	CPUE		2000	8	15	22.3	9.6	51.9	43.8		9.2		53.0	22.6	124.4
Sevogle	104	CPUE		2001	8	16	78.4	33.6	183.0	51.1		6.8		57.9	24.7	136.2
Sevogle	104	CPUE		2002	8	27	123.1	52.6	288.4	38.8		5.0		43.8	18.7	102.5
Sevogle	104	CPUE		2003	8	26	49.9	21.4	116.2	51.9		8.8		60.7	25.8	142.9
Sevogle	104	CPUE		2004	8	17	119.8	51.2	280.6	29.5		16.1		45.6	19.5	106.7
Sevogle	108	CPUE		1994	7	26	115.1	49.5	267.7	16.2		5.6		21.8	9.4	50.6
Sevogle	111	CPUE		1994	8	3	28.8	12.4	66.7	34.5		6.1		40.6	17.4	94.4
Sevogle	111	CPUE		2003	9	8	28.3	12.2	66.0	50.2		9.5		59.6	25.4	140.2
Sevogle	112.1	CPUE		1994	8	6	22.1	9.5	51.3	23.0		0.0		23.0	9.9	53.3
Sevogle	112.2	CPUE		1994	8	6	47.4	20.4	109.9	58.2		5.7		63.9	27.3	149.6
Sevogle	152	CPUE		1996	8	29	0.0	n.a.	n.a.	0.0		0.0		0.0	n.a.	n.a.
Sevogle	153	CPUE		1998	8	5	41.5	17.9	96.3	17.3		0.0		17.3	7.5	40.1
Sevogle	153	CPUE		1999	9	3	136.5	58.6	317.8	37.4		11.5		48.9	21.0	114.1
Sevogle	153	CPUE		2000	9	12	0.0	n.a.	n.a.	50.4		2.3		52.6	22.4	123.5
Sevogle	153	CPUE		2001	9	14	91.1	39.0	212.8	30.6		7.9		38.5	16.5	89.9
Sevogle	153	CPUE		2002	9	4	0.0	n.a.	n.a.	54.9		5.0		59.9	25.5	140.9

Appendix 1 (cont'd). Atlantic salmon density estimates and 95% confidence intervals for 1970-2004.

River	Site	Estimator	Removal Sweeps	Year	Month	Day	Density (fish per $100m^2$), variance, and/or upper and lower 95% CI									
							Age 0	lower	upper	Age 1	Var 1	Age 2+	Var 2+	Parr	lower	upper
Sevogle	153	CPUE		2003	9	8	0.0	n.a.	n.a.	20.9		10.2		31.1	13.4	72.5
Sevogle	153	CPUE		2004	9	1	156.1	66.5	366.7	4.7		7.0		11.7	5.0	27.2
Sevogle	190	CPUE		1997	8	27	71.0	30.6	164.9	15.0		1.5		16.4	7.1	38.1
Sevogle	190	CPUE		1998	8	21	63.0	27.1	146.1	23.5		3.7		27.2	11.7	63.0
Sevogle	190	CPUE		1999	9	9	56.8	24.5	131.8	17.3		0.0		17.3	7.4	40.1
Sevogle	190	CPUE		2000	9	15	24.2	10.4	56.4	17.6		3.4		21.0	9.0	48.8
Sevogle	190	CPUE		2001	9	14	53.9	23.1	125.5	11.2		1.1		12.3	5.3	28.7
Sevogle	190	CPUE		2002	9	5	70.5	30.2	164.5	14.3		1.0		15.3	6.6	35.6
Sevogle	190	CPUE		2003	8	29	50.3	21.6	117.2	12.9		1.0		13.9	6.0	32.4
Sevogle	190	CPUE		2004	9	1	40.8	17.5	94.9	14.9		1.9		16.7	7.2	38.9
Sevogle	208	CPUE		2002	9	24	0.0	n.a.	n.a.	31.0		8.0		39.0	16.7	91.1
Sevogle	208	Zippin	3	2003	9	5	0.0	n.a.	n.a.	6.0		7.1		13.1	n.a.	n.a.
Sevogle	208	Zippin	4	2004	8	26	164.0	159.0	169.1	14.0		3.9		17.9	16.5	19.2
Tomogonops	113	Zippin		1973	9	11	0.3	n.a.	n.a.					0.0	n.a.	n.a.
Tomogonops	113	Zippin		1974	8	7	2.7	n.a.	n.a.					0.0	n.a.	n.a.
Tomogonops	113	Zippin		1975	8	28	1.5	n.a.	n.a.					2.4	n.a.	n.a.
Tomogonops	113	Zippin		1976	9	1	9.8	n.a.	n.a.					3.4	n.a.	n.a.
Tomogonops	113	Zippin		1977	8	11	1.3	n.a.	n.a.					6.2	n.a.	n.a.
Tomogonops	113	Zippin		1978	8	16	4.7	n.a.	n.a.					6.9	n.a.	n.a.
Tomogonops	113	Zippin		1979	7	31	0.0	n.a.	n.a.					2.1	n.a.	n.a.
Tomogonops	113	CPUE		1994	8	6	5.4	2.3	12.6	21.8		5.1		26.8	11.6	62.3
Tomogonops	113	CPUE		1997	8	26	18.6	8.0	43.2	7.9		0.0		7.9	3.4	18.5
Tomogonops	113	CPUE		1998	8	6	10.3	4.4	24.1	12.4		0.0		12.4	5.3	28.8
Tomogonops	113	CPUE		1999	8	29	86.5	37.2	200.9	47.6		10.1		57.7	24.7	134.8
Tomogonops	113	CPUE		2000	9	5	40.8	17.5	95.0	21.4		3.4		24.8	10.7	57.7
Tomogonops	113	CPUE		2001	8	17	34.0	14.6	79.1	48.6		8.8		57.4	24.4	134.9
Tomogonops	113	CPUE		2002	9	3	48.7	20.9	113.4	44.4		6.6		51.0	21.7	119.5
Tomogonops	113	CPUE		2003	8	26	38.5	16.5	89.5	30.0		2.7		32.6	14.0	76.1
Tomogonops	113	CPUE		2004	8	18	75.2	32.2	175.5	14.9		10.0		24.9	10.7	57.9
Tomogonops	114	CPUE		1994	8	10	0.0	n.a.	n.a.	11.2		9.1		20.3	8.7	47.0
Tomogonops	114	CPUE		1999	9	8	0.0	n.a.	n.a.	7.1		5.8		12.9	5.5	29.9
Tomogonops	114	CPUE		2001	8	17	18.6	8.0	43.2	41.6		3.8		45.4	19.4	106.3
Tomogonops	114	CPUE		2002	9	3	18.7	8.0	43.6	33.3		6.6		39.8	17.1	93.1
Tomogonops	114	CPUE		2004	8	18	0.0	n.a.	n.a.	13.9		20.1		34.0	14.6	79.3
Tomogonops	148	Zippin		1975	8	28	0.0	n.a.	n.a.					3.3	n.a.	n.a.
Tomogonops	148	Zippin		1976	8	9	0.4	n.a.	n.a.					4.5	n.a.	n.a.
Tomogonops	148	Zippin		1977	8	11	0.3	n.a.	n.a.					9.7	n.a.	n.a.
Tomogonops	148	Zippin		1978	8	16	0.0	n.a.	n.a.					2.3	n.a.	n.a.
Tomogonops	149	Zippin		1976	9	8	0.0	n.a.	n.a.					0.3	n.a.	n.a.
Tomogonops	149	Zippin		1977	8	11	1.0	n.a.	n.a.					7.8	n.a.	n.a.
Tomogonops	149	Zippin		1978	8	17	0.0	n.a.	n.a.					3.8	n.a.	n.a.
Tomogonops	149	Zippin		1979	7	31	0.0	n.a.	n.a.					1.7	n.a.	n.a.
Tomogonops	149	Zippin		1982	9	21	0.7	n.a.	n.a.					2.7	n.a.	n.a.
Tomogonops	151	Zippin		1975	8	27	2.3	n.a.	n.a.					31.6	n.a.	n.a.
Tomogonops	151	Zippin		1976	7	28	0.5	n.a.	n.a.					6.6	n.a.	n.a.
Tomogonops	151	Zippin		1977	8	11	1.9	n.a.	n.a.					30.1	n.a.	n.a.
Tomogonops	151	Zippin		1978	8	17	0.0	n.a.	n.a.					14.6	n.a.	n.a.
Tomogonops	151	Zippin		1979	7	30	0.9	n.a.	n.a.					7.1	n.a.	n.a.
Tomogonops	151	Zippin		1982	9	10	0.0	n.a.	n.a.					0.0	n.a.	n.a.
LSW Miramichi	43	Zippin	5	1971	6	25	4.9	n.a.	n.a.	0.3	n.a.	0.5	0.0	0.8		
LSW Miramichi	43	Zippin	5	1972	8	18	2.5	n.a.	n.a.	0.3	n.a.	0.3	n.a.	0.6		
LSW Miramichi	43	Zippin	4	1973	7	20	1.8	n.a.	n.a.	0.0	0.0	0.6	0.0	0.6		
LSW Miramichi	43	Zippin	5	1974	7	16	1.5	n.a.	n.a.	0.0	0.0	0.0	0.0	0.0		
LSW Miramichi	43	Zippin	5	1975	7	16	14.9	n.a.	n.a.	8.6	-169.5	0.0	n.a.	8.6		
LSW Miramichi	43	Zippin	5	1976	9	7	13.4	12.9	13.9	0.4	n.a.	0.4	n.a.	0.8		
LSW Miramichi	43	Zippin	5	1977	8	25	16.6	14.5	18.7	1.3	0.0	0.3	n.a.	1.6		
LSW Miramichi	43	Zippin	4	1978	7	21	0.6	0.6	0.6	0.0	0.0	0.0	0.0	0.0		
LSW Miramichi	43	Zippin	5	1979	7	20	0.7	0.7	0.7	0.4	n.a.	0.0	0.0	0.4		
LSW Miramichi	43	Zippin	5	1980	8	15	2.9	n.a.	n.a.	0.0	0.0	0.0	0.0	0.0		
LSW Miramichi	43	Zippin	5	1981	7	29	15.1	13.1	17.1	0.0	0.0	0.4	n.a.	0.4		
LSW Miramichi	43	Zippin	5	1982	8	13	5.3	5.2	5.3	2.8	0.0	0.4	n.a.	3.2		
LSW Miramichi	43	Zippin	4	1983	8	12	12.5	12.2	12.7	0.0	0.0	0.0	0.0	0.0		
LSW Miramichi	43	Zippin	4	1984	8	24	12.9	12.1	13.8	0.0	0.0	1.2	n.a.	1.2		
LSW Miramichi	43	Zippin	4	1985	8	19	32.5	30.7	34.2	1.6	0.0	0.0	n.a.	1.6		
LSW Miramichi	43	Zippin	4	1986	8	8	40.8	33.4	48.2	3.9	-0.5	0.0	-4.9	3.9		
LSW Miramichi	43	Zippin	4	1987	7	10	46.3	-37.6	130.2	0.0	0.0	0.0	0.0	0.0		
LSW Miramichi	43	Zippin	4	1988	7	22	66.0	62.4	69.6	0.0	0.0	0.0	0.0	0.0		

Appendix 1 (cont'd). Atlantic salmon density estimates and 95% confidence intervals for 1970-2004.

River	Site	Estimator	Removal Sweeps	Year	Month	Day	Density (fish per 100m²), variance, and/or upper and lower 95% CI									
							Age 0	lower	upper	Age 1	Var 1	Age 2+	Var 2+	Parr	lower	upper
LSW Miramichi	43	Zippin	4	1989	7	21	88.5	75.0	102.0	2.7	n.a.	2.7	0.2	5.5		
LSW Miramichi	43	Zippin	4	1990	7	13	66.4	53.0	79.9	0.8	n.a.	0.0	0.0	0.8		
LSW Miramichi	43	Zippin	3	1992	7	28	8.4	n.a.	n.a.	0.0	0.0	0.0	0.0	0.0		
LSW Miramichi	43	Zippin	3	1993	7	30	37.9	19.0	56.8	9.4		0.0		9.4	6.7	12.1
LSW Miramichi	43	CPUE		1994	7	19	0.0	n.a.	n.a.	0.0		0.0		0.0	n.a.	n.a.
LSW Miramichi	43	CPUE		1995	9	26	45.9	19.8	106.5	21.6		0.0		21.6	9.3	50.1
LSW Miramichi	43	CPUE		1996	9	3	86.9	37.4	201.8	12.5		10.2		22.8	9.8	52.8
LSW Miramichi	43	CPUE		1997	10	3	24.0	10.3	55.7	15.1		0.0		15.1	6.5	35.1
LSW Miramichi	43	CPUE		1998	8	21	42.6	18.4	98.8	6.3		1.5		8.2	3.5	19.0
LSW Miramichi	43	CPUE		1999	8	26	57.0	24.6	132.2	16.1		1.6		17.7	7.6	41.0
LSW Miramichi	43	CPUE		2000	8	31	23.5	10.1	54.7	6.7		0.0		6.7	2.9	15.8
LSW Miramichi	43	CPUE		2001	8	28	18.1	7.8	42.1	18.0		0.0		18.0	7.8	41.9
LSW Miramichi	43	CPUE		2002	9	4	61.2	26.3	142.6	8.6		0.0		8.6	3.7	20.1
LSW Miramichi	43	CPUE		2003	9	3	13.6	5.8	31.6	9.0		1.1		10.1	4.3	23.5
LSW Miramichi	43	CPUE		2004	8	23	45.5	19.6	106.0	6.5		0.0		6.5	2.8	15.2
LSW Miramichi	44	Zippin	5	1971	6	28	0.8	0.7	1.0	9.5	56.4	0.4	n.a.	9.9		
LSW Miramichi	44	Zippin	5	1972	8	21	5.5	-0.9	12.0	5.7	-61.2	6.8	4.1	12.5		
LSW Miramichi	44	Zippin	5	1973	7	23	3.3	3.2	3.4	1.3	0.0	0.0	0.0	1.3		
LSW Miramichi	44	Zippin	5	1974	8	26	11.3	9.5	13.0	8.1	0.9	0.6	n.a.	8.7		
LSW Miramichi	44	Zippin	5	1975	8	20	12.3	10.6	14.0	18.2	0.6	2.5	0.0	20.7		
LSW Miramichi	44	Zippin	5	1976	8	23	12.1	-2.2	26.4	10.0	1.3	1.6	-0.5	11.6		
LSW Miramichi	44	Zippin	5	1977	8	3	3.0	n.a.	n.a.	1.2	-0.3	0.3	0.0	1.5		
LSW Miramichi	44	Zippin	5	1978	8	1	6.0	1.5	10.5	4.0	n.a.	0.9	n.a.	4.9		
LSW Miramichi	44	Zippin	5	1979	10	1	14.3	n.a.	n.a.	3.3	0.0	0.0	0.0	3.3		
LSW Miramichi	44	Zippin	5	1980	9	17	10.0	9.7	10.2	7.8	1.8	0.4	n.a.	8.2		
LSW Miramichi	44	Zippin	5	1981	8	25	37.4	35.9	38.9	9.5	0.0	3.7	0.0	13.2		
LSW Miramichi	44	Zippin	5	1982	9	13	7.3	6.0	8.6	12.8	0.3	1.2	0.0	14.0		
LSW Miramichi	44	Zippin	5	1983	7	5	3.0	2.9	3.1	1.1	-0.6	0.5	n.a.	1.6		
LSW Miramichi	44	Zippin	4	1984	7	31	14.0	12.6	15.3	2.6	-1.6	1.7	0.0	4.3		
LSW Miramichi	44	Zippin	4	1985	8	6	30.0	25.8	34.2	4.8	0.0	0.0	0.0	4.8		
LSW Miramichi	44	Zippin	4	1986	8	6	15.3	13.4	17.3	11.6	0.7	2.9	-3.0	14.5		
LSW Miramichi	44	Zippin	4	1987	7	24	32.2	n.a.	n.a.	11.2	n.a.	9.6	75.1	20.8		
LSW Miramichi	44	Zippin	4	1988	7	14	31.4	21.6	41.3	6.9	-33.6	5.1	0.2	12.0		
LSW Miramichi	44	Zippin	3	1989	7	3	33.3	n.a.	n.a.	2.8	n.a.	0.0	0.0	2.8		
LSW Miramichi	44	Zippin	3	1990	7	5	27.8	22.3	33.3	7.4	n.a.	0.7	n.a.	8.1		
LSW Miramichi	44	Zippin	4	1992	7	27	122.7	n.a.	n.a.	21.0	21.7	0.0	0.0	21.0		
LSW Miramichi	44	Zippin	4	1993	7	22	59.7	44.2	75.3	7.1		6.3		13.4	9.6	17.2
LSW Miramichi	44	CPUE		1994	7	19	43.1	18.6	99.9	9.5		2.8		12.3	5.3	28.6
LSW Miramichi	44	CPUE		1995	9	26	97.3	41.9	226.0	38.2		0.9		39.1	16.8	90.9
LSW Miramichi	44	CPUE		1996	9	3	122.6	52.7	285.4	16.0		0.0		16.0	6.9	37.1
LSW Miramichi	44	CPUE		1997	10	3	81.8	35.3	190.0	32.6		5.1		37.7	16.2	87.6
LSW Miramichi	44	CPUE		1998	8	21	89.0	38.3	206.7	33.5		0.0		33.5	14.4	77.9
LSW Miramichi	44	CPUE		1999	8	28	51.3	22.1	118.9	42.2		4.2		46.4	19.9	108.1
LSW Miramichi	44	CPUE		2000	9	15	88.4	37.8	206.5	23.9		2.4		26.3	11.3	61.2
LSW Miramichi	44	CPUE		2001	8	28	45.4	19.5	105.7	37.2		0.0		37.2	15.9	86.8
LSW Miramichi	44	CPUE		2002	9	4	95.7	41.0	223.7	26.1		3.1		29.2	12.5	68.0
LSW Miramichi	44	CPUE		2003	9	23	44.9	19.3	104.6	19.4		0.8		20.2	8.7	47.0
LSW Miramichi	44	CPUE		2004	8	24	86.6	37.1	202.3	12.5		12.5		25.0	10.7	58.1
LSW Miramichi	45	Zippin	5	1971	6	23	23.6	-14.6	61.8	0.6	n.a.	0.9	0.0	1.5		
LSW Miramichi	45	Zippin	5	1972	8	15	5.2	-8.5	18.9	0.0	0.0	0.0	0.0	0.0		
LSW Miramichi	45	Zippin	5	1973	7	30	31.5	6.9	56.1	0.9	n.a.	0.0	0.0	0.9		
LSW Miramichi	45	Zippin	5	1974	8	27	15.5	14.5	16.4	1.0	n.a.	0.0	0.0	1.0		
LSW Miramichi	45	Zippin	5	1975	8	12	19.8	n.a.	n.a.	0.0	0.0	0.5	n.a.	0.5		
LSW Miramichi	45	Zippin	5	1976	7	22	12.2	8.9	15.5	1.1	n.a.	1.1	-0.6	2.1		
LSW Miramichi	45	Zippin	5	1977	8	19	44.8	n.a.	n.a.	0.0	0.0	0.4	n.a.	0.4		
LSW Miramichi	45	Zippin	5	1978	8	23	12.0	10.4	13.6	0.5	n.a.	0.0	0.0	0.5		
LSW Miramichi	45	Zippin	5	1979	9	17	11.7	10.2	13.3	0.4	0.0	0.4	n.a.	0.7		
LSW Miramichi	45	Zippin	5	1980	9	5	11.2	10.1	12.3	0.4	n.a.	0.4	0.0	0.7		
LSW Miramichi	45	Zippin	5	1981	7	31	27.2	21.1	33.2	0.0	0.0	0.8	n.a.	0.8		
LSW Miramichi	45	Zippin	5	1982	9	22	4.1	4.0	4.2	9.4	1.2	0.0	0.0	9.4		
LSW Miramichi	45	Zippin	5	1983	8	8	28.8	27.3	30.3	0.0	0.0	0.5	n.a.	0.5		
LSW Miramichi	45	Zippin	4	1984	7	31	31.0	28.7	33.3	0.5	n.a.	0.0	0.0	0.5		
LSW Miramichi	45	Zippin	4	1985	8	12	34.4	31.0	37.8	2.4	n.a.	0.0	0.0	2.4		
LSW Miramichi	45	Zippin	4	1986	8	7	23.2	21.1	25.3	2.8	-1.7	0.0	0.0	2.8		
LSW Miramichi	45	CPUE		1993	8	30	46.8	20.2	108.7	0.0		0.0		0.0	n.a.	n.a.
LSW Miramichi	45	CPUE		1994	7	26	63.6	27.4	147.6	6.4		0.0		6.4	2.7	15.0
LSW Miramichi	45	CPUE		1995	9	26	71.9	31.0	166.8	17.7		5.9		23.7	10.2	54.9

Appendix 1 (cont'd). Atlantic salmon density estimates and 95% confidence intervals for 1970-2004.

			Removal				Density (fish per 100m^2), variance, and/or upper and lower 95% CI									
River	Site	Estimator	Sweeps	Year	Month	Day	Age 0	lower	upper	Age 1	Var 1	Age 2+	Var 2+	Parr	lower	upper
LSW Miramichi	45	CPUE		1996	9	6	63.3	27.3	146.9	3.4		0.3		3.7	1.6	8.7
LSW Miramichi	45	CPUE		1997	10	1	46.4	20.0	107.5	11.9		6.3		18.3	7.9	42.4
LSW Miramichi	45	CPUE		1998	8	20	76.5	33.0	177.7	13.7		1.7		15.4	6.6	35.8
LSW Miramichi	45	CPUE		1999	8	24	111.0	47.7	258.0	2.8		2.3		5.1	2.2	12.0
LSW Miramichi	45	CPUE		2000	8	21	68.5	29.4	159.7	7.1		1.2		8.3	3.6	19.4
LSW Miramichi	45	CPUE		2001	9	12	76.7	32.9	179.0	10.5		0.0		10.5	4.5	24.4
LSW Miramichi	45	CPUE		2002	9	6	77.6	33.2	181.0	8.8		0.0		8.8	3.8	20.5
LSW Miramichi	45	CPUE		2003	9	4	56.9	24.4	132.6	14.9		0.0		14.9	6.4	34.6
LSW Miramichi	45	CPUE		2004	9	7	55.5	23.8	129.2	16.6		5.5		22.1	9.5	51.4
LSW Miramichi	46	Zippin	5	1971	6	22	8.0	n.a.	n.a.	0.7	0.0	5.0	0.0	5.7		
LSW Miramichi	46	Zippin	4	1972	8	16	0.0	n.a.	n.a.	4.8	0.0	4.1	0.0	8.9		
LSW Miramichi	46	Zippin	5	1973	7	5	15.8	n.a.	n.a.	0.8	-0.4	1.2	n.a.	2.0		
LSW Miramichi	46	Zippin	5	1974	7	17	0.7	0.7	0.7	34.0	0.2	1.1	-0.5	35.1		
LSW Miramichi	46	Zippin	5	1975	7	15	0.0	n.a.	n.a.	1.4	0.0	11.6	1.2	13.0		
LSW Miramichi	46	Zippin	5	1976	7	21	2.1	1.3	2.8	4.2	0.0	1.6	0.0	5.8		
LSW Miramichi	46	Zippin	5	1977	7	12	104.8	99.6	109.9	4.5	-3.9	2.4	0.0	6.9		
LSW Miramichi	46	Zippin	5	1978	7	10	116.3	110.8	121.7	25.4	0.5	0.7	0.0	26.1		
LSW Miramichi	46	Zippin	5	1979	7	10	0.6	0.6	0.6	14.0	0.1	7.7	1.0	21.7		
LSW Miramichi	46	Zippin	5	1980	7	10	2.7	2.6	2.8	6.3	4.2	7.5	0.6	13.8		
LSW Miramichi	46	Zippin	5	1981	6	30	3.0	n.a.	n.a.	4.8	0.0	5.2	1.9	10.0		
LSW Miramichi	46	Zippin	5	1982	6	28	0.0	n.a.	n.a.	7.3	0.0	1.5	0.0	8.9		
LSW Miramichi	46	Zippin	5	1983	7	13	5.4	n.a.	n.a.	13.2	1.2	8.2	3.1	21.4		
LSW Miramichi	46	Zippin	4	1984	7	9	0.0	n.a.	n.a.	11.3	2.1	4.8	2.9	16.1		
LSW Miramichi	46	Zippin	4	1985	7	15	0.0	n.a.	n.a.	11.3	0.5	2.3	-1.5	13.5		
LSW Miramichi	46	Zippin	4	1986	7	23	1.2	n.a.	n.a.	0.0	0.0	4.3	-10.0	4.3		
LSW Miramichi	46	Zippin	4	1987	7	15	0.0	n.a.	n.a.	9.5	n.a.	3.4	n.a.	12.8		
LSW Miramichi	46	Zippin	4	1988	7	19	18.2	-1.3	37.8	58.6	2105.5	7.7	0.0	66.4		
LSW Miramichi	46	Zippin	4	1989	7	14	53.1	51.7	54.5	10.9	5.6	5.5	-53.7	16.4		
LSW Miramichi	46	Zippin	3	1990	7	16	0.0	n.a.	n.a.	14.4	6.9	1.2	n.a.	15.6		
LSW Miramichi	46	Zippin	3	1991	8	4	46.4	37.9	54.8	4.7	1.1	7.1	7.0	11.8		
LSW Miramichi	46	Zippin	3	1992	7	17	25.9	n.a.	n.a.	40.0	16.2	4.6	-2.8	44.5		
LSW Miramichi	46	Zippin	4	1993	7	21	23.3	20.3	26.3	11.2		7.8		19.1	-13.7	51.8
LSW Miramichi	46	Zippin	3	1994	7	25	1.1	n.a.	n.a.	7.9		3.6		11.5	n.a.	n.a.
LSW Miramichi	46	CPUE		1995	9	26	0.0	n.a.	n.a.	13.3		3.2		16.5	7.1	38.3
LSW Miramichi	46	CPUE		1996	9	6	0.0	n.a.	n.a.	6.6		3.7		10.3	4.4	24.0
LSW Miramichi	46	Zippin	3	1997	10	2	0.0	n.a.	n.a.	7.8		1.4		9.3	n.a.	n.a.
LSW Miramichi	46	CPUE		1998	8	20	0.0	n.a.	n.a.	21.7		5.4		27.2	11.7	63.1
LSW Miramichi	46	CPUE		1999	8	28	89.7	38.6	208.4	9.7		0.0		9.7	4.2	22.7
LSW Miramichi	46	CPUE		2000	9	7	10.2	4.3	23.7	16.0		2.0		18.0	7.7	41.8
LSW Miramichi	46	Zippin	3	2001	8	17	3.4	n.a.	n.a.	25.1		18.1		43.2	39.8	46.6
LSW Miramichi	46	Zippin	3	2002	8	30	0.4	n.a.	n.a.	15.4		11.8		27.1	23.6	30.6
LSW Miramichi	46	Zippin	3	2003	9	4	0.0	n.a.	n.a.	15.6		5.8		21.4	n.a.	n.a.
LSW Miramichi	46	Zippin	3	2004	8	23	86.4	81.6	91.2	0.0		5.0		5.0	n.a.	n.a.
LSW Miramichi	100	CPUE		1994	7	19	16.8	7.2	39.2	5.2		0.0		5.2	2.2	12.1
LSW Miramichi	100	CPUE		1999	9	8	215.9	92.3	504.6	43.2		8.7		51.9	22.2	121.0
LSW Miramichi	100	CPUE		2001	8	28	51.8	22.3	120.7	40.8		2.5		43.3	18.5	101.3
LSW Miramichi	100	CPUE		2002	9	4	61.6	26.4	143.5	27.6		6.5		34.1	14.6	79.5
LSW Miramichi	101	CPUE		1994	7	19	30.9	13.3	71.8	17.7		3.1		20.9	9.0	48.4
LSW Miramichi	102	CPUE		1994	7	19	0.0	n.a.	n.a.	3.8		3.0		6.9	2.9	16.0
LSW Miramichi	105	CPUE		1994	7	26	53.8	23.2	124.7	0.0		0.0		0.0	n.a.	n.a.
LSW Miramichi	105	CPUE		1995	9	22	49.0	21.1	113.5	18.1		3.7		21.8	9.4	50.5
LSW Miramichi	106.1	CPUE		1994	8	22	6.5	2.8	15.3	0.0		0.0		0.0	n.a.	n.a.
LSW Miramichi	106.2	CPUE		1994	7	26	74.1	31.9	171.9	8.1		6.6		14.8	6.4	34.3
LSW Miramichi	107	CPUE		1999	8	28	47.5	20.5	110.1	10.3		1.8		12.1	5.2	28.0
LSW Miramichi	107	CPUE		2000	8	21	27.5	11.8	63.9	5.6		2.4		7.9	3.4	18.5
LSW Miramichi	107	CPUE		2001	9	12	4.8	2.0	11.3	14.2		2.4		16.6	7.1	38.4
LSW Miramichi	107	CPUE		2002	9	6	30.3	13.0	70.6	12.3		0.0		12.3	5.3	28.7
LSW Miramichi	107	CPUE		2004	9	7	27.5	11.8	63.9	8.2		2.7		10.9	4.7	25.3
LSW Miramichi	107.1	CPUE		1994	7	26	7.0	3.0	16.3	0.0		0.0		0.0	n.a.	n.a.
LSW Miramichi	107.1	CPUE		1995	9	22	0.0	n.a.	n.a.	19.8		4.3		24.1	10.4	55.9
LSW Miramichi	107.1	CPUE		1997	9	19	19.8	8.5	46.0	17.4		8.6		26.1	11.2	60.5
LSW Miramichi	107.1	CPUE		1998	8	20	35.4	15.3	82.2	13.5		5.8		19.3	8.3	44.8
LSW Miramichi	107.2	CPUE		1994	7	26	6.5	2.8	15.3	18.1		1.8		19.9	8.6	46.3
LSW Miramichi	107.2	CPUE		1995	9	22	5.1	2.2	12.1	9.5		1.7		11.1	4.8	25.9
LSW Miramichi	144	CPUE		1995	9	11	0.0	n.a.	n.a.	15.3		0.0		15.3	6.6	35.4
LSW Miramichi	145	CPUE		1996	9	6	76.8	33.1	178.2	36.6		7.4		44.0	18.9	102.4
LSW Miramichi	145	CPUE		1997	8	29	37.4	16.1	86.7	46.9		7.0		54.0	23.1	126.0

Appendix 1 (cont'd). Atlantic salmon density estimates and 95% confidence intervals for 1970-2004.

			Removal				Density (fish per 100m^2), variance, and/or upper and lower 95% CI									
River	Site	Estimator	Sweeps	Year	Month	Day	Age 0	lower	upper	Age 1	Var 1	Age 2+	Var 2+	Parr	lower	upper
LSW Miramichi	145	CPUE		1998	8	20	34.9	15.0	80.9	36.7		7.8		44.5	19.1	103.7
LSW Miramichi	145	CPUE		1999	8	24	24.7	10.6	57.4	41.3		6.4		47.8	20.5	111.3
LSW Miramichi	145	CPUE		2000	9	7	52.9	22.7	123.3	37.6		10.7		48.3	20.6	113.3
LSW Miramichi	145	CPUE		2001	9	12	16.5	7.1	38.5	42.8		9.2		52.1	22.2	122.2
LSW Miramichi	145	CPUE		2002	9	6	15.5	6.7	36.2	44.7		5.4		50.2	21.4	117.6
LSW Miramichi	145	CPUE		2003	9	23	16.1	6.9	37.5	38.0		3.7		41.7	17.8	97.6
LSW Miramichi	145	CPUE		2004	9	7	33.5	14.4	77.9	36.3		14.3		50.6	21.6	118.6
LSW Miramichi	146	Zippin		1982	8	17	5.4	n.a.	n.a.					44.5	n.a.	n.a.
LSW Miramichi	146	Zippin		1982	8	16	2.0	n.a.	n.a.					48.0	n.a.	n.a.
LSW Miramichi	146	CPUE		1996	8	29	92.0	39.6	213.8	35.0		2.1		37.1	15.9	86.2
LSW Miramichi	146	CPUE		1998	9	4	136.5	58.6	317.8	24.1		4.2		28.4	12.2	65.8
LSW Miramichi	146	CPUE		1999	9	10	235.8	100.8	551.7	35.8		5.7		41.5	17.9	96.7
LSW Miramichi	146	CPUE		2000	9	12	41.1	17.7	95.6	40.5		4.0		44.5	19.0	104.2
LSW Miramichi	146	CPUE		2001	8	22	112.2	47.9	262.5	34.0		5.2		39.2	16.8	91.5
LSW Miramichi	146	CPUE		2002	9	9	62.5	26.8	145.7	43.6		8.3		51.9	22.1	121.7
LSW Miramichi	147	Zippin		1982	8	16	1.3	n.a.	n.a.					22.3	n.a.	n.a.
LSW Miramichi	147	CPUE		1996	8	29	135.8	58.3	316.1	32.2		2.6		34.8	15.0	80.9
LSW Miramichi	147	CPUE		1997	9	15	175.8	75.4	410.2	58.0		1.8		59.7	25.6	139.7
LSW Miramichi	147	CPUE		1998	9	4	91.0	39.2	211.3	29.0		2.9		31.9	13.7	74.0
LSW Miramichi	147	CPUE		1999	9	10	86.6	37.3	201.0	11.7		0.0		11.7	5.0	27.1
LSW Miramichi	147	CPUE		2000	9	12	118.1	50.4	276.6	34.6		4.3		38.9	16.7	91.0
LSW Miramichi	147	CPUE		2001	8	22	73.4	31.5	171.2	36.0		3.4		39.4	16.8	92.0
LSW Miramichi	147	CPUE		2002	9	9	155.0	66.0	364.0	42.1		4.1		46.2	19.7	108.2
LSW Miramichi	147	CPUE		2003	9	8	46.2	19.9	107.6	31.9		2.8		34.7	14.9	80.9
LSW Miramichi	147	CPUE		2004	9	1	122.5	52.3	286.9	15.1		13.4		28.5	12.2	66.4
LSW Miramichi	205	CPUE		2001	9	12	69.8	29.9	162.8	30.4		4.8		35.2	15.1	82.2
LSW Miramichi	207	CPUE		2001	8	22	7.1	3.0	16.7	15.2		2.2		17.4	7.5	40.5
LSW Miramichi	207	CPUE		2002	9	9	0.0	n.a.	n.a.	7.4		1.3		8.7	3.7	20.4
Barnaby	97	Zippin	4	1971	9	1	2.8	2.8	2.8	0.0	0.0	0.5	0.0	0.5		
Barnaby	97	Zippin	5	1972	8	24	0.0	n.a.	n.a.	0.7	0.0	2.5	-4.3	3.2		
Barnaby	97	Zippin	4	1973	8	15	12.8	11.0	14.6	0.0	0.0	0.8	n.a.	0.8		
Barnaby	97	Zippin	5	1974	8	20	0.0	n.a.	n.a.	5.3	0.0	0.0	1.7	5.3		
Barnaby	97	Zippin	4	1975	8	29	3.8	2.1	5.4	1.0	n.a.	1.0	-0.3	1.9		
Barnaby	97	Zippin	4	1976	8	20	0.0	n.a.	n.a.	0.3	0.0	0.9	n.a.	1.2		
Barnaby	97	Zippin	4	1977	8	24	0.0	n.a.	n.a.	0.3	0.0	0.7	n.a.	1.0		
Barnaby	97	Zippin	5	1978	8	30	7.5	7.4	7.5	3.0	0.0	0.6	n.a.	3.6		
Barnaby	97	Zippin	5	1982	9	15	2.1	1.0	3.2	2.9	-12.2	1.2	0.0	4.1		
Barnaby	97	Zippin	5	1983	9	29	13.2	11.8	14.6	1.7	n.a.	0.8	n.a.	2.5		
Barnaby	97	Zippin	4	1984	8	31	0.0	n.a.	n.a.	6.0	0.7	0.2	n.a.	6.2		
Barnaby	97	CPUE		1993	9	8	64.6	27.8	149.9	16.5		1.6		18.1	7.8	42.0
Barnaby	97	Zippin	3	1994	8	17	1.5	n.a.	n.a.	5.3		3.6		8.9	-1.7	19.4
Barnaby	97	CPUE		1997	9	11	37.4	16.1	86.7	35.6		7.3		42.9	18.4	99.9
Barnaby	97	CPUE		1998	8	18	0.0	n.a.	n.a.	12.9		0.8		13.7	5.9	31.8
Barnaby	97	CPUE		1999	8	16	4.5	1.9	10.6	14.5		5.7		20.2	8.7	46.9
Barnaby	97	CPUE		2001	9	11	0.0	n.a.	n.a.	27.3		0.7		28.1	12.1	65.4
Barnaby	98	Zippin	4	1971	8	31	6.8	6.8	6.8	0.0	0.0	0.7	0.0	0.7		
Barnaby	98	Zippin	5	1972	9	15	0.0	n.a.	n.a.	7.5	0.0	4.1	0.0	11.6		
Barnaby	98	Zippin	5	1973	7	26	17.5	n.a.	n.a.	0.0	0.0	0.3	n.a.	0.3		
Barnaby	98	Zippin	5	1974	7	12	0.0	n.a.	n.a.	7.8	0.0	4.5	0.9	12.3		
Barnaby	98	Zippin	5	1975	7	11	2.2	n.a.	n.a.	0.0	0.0	3.9	0.2	3.9		
Barnaby	98	Zippin	5	1976	7	5	0.6	n.a.	n.a.	2.4	0.0	3.0	0.0	5.4		
Barnaby	98	Zippin	5	1977	7	15	2.6	n.a.	n.a.	0.3	n.a.	3.1	-7.9	3.5		
Barnaby	98	Zippin	5	1978	8	25	15.6	14.4	16.9	0.0	0.0	5.9	0.1	5.9		
Barnaby	98	Zippin	5	1982	9	15	0.0	n.a.	n.a.	1.0	0.0	5.0	0.0	6.0		
Barnaby	98	Zippin	5	1983	9	30	0.0	n.a.	n.a.	5.3	0.0	10.2	0.0	15.6		
Barnaby	98	Zippin	4	1984	8	29	0.5	n.a.	n.a.	3.6	n.a.	8.1	0.0	11.7		
Barnaby	98	CPUE		1993	9	8	34.1	14.7	79.2	43.6		0.0		43.6	18.7	101.6
Barnaby	98	CPUE		1997	8	26	18.1	7.8	42.0	53.3		4.1		57.4	24.6	134.2
Barnaby	98	CPUE		1998	8	18	0.0	n.a.	n.a.	25.3		5.3		30.5	13.2	70.9
Barnaby	98	CPUE		1999	8	16	74.7	32.2	173.5	33.6		8.9		42.4	18.2	98.8
Barnaby	98	CPUE		2000	9	8	110.6	47.3	258.9	24.3		0.0		24.3	10.4	56.5
Barnaby	98	CPUE		2001	9	11	0.0	n.a.	n.a.	33.3		0.0		33.3	14.3	77.5
Barnaby	98	CPUE		2002	9	9	0.0	n.a.	n.a.	17.2		0.0		17.2	7.4	40.0
Barnaby	98	CPUE		2003	9	26	9.4	4.0	22.1	26.1		0.0		26.1	11.2	60.7
Barnaby	98	CPUE		2004	9	29	49.9	21.4	116.1	21.2		1.8		22.9	9.9	53.3
Barnaby	100	CPUE		2004	8	24	49.0	21.1	114.2	23.2		17.4		40.6	17.4	95.0
Barnaby	131	CPUE		1994	9	1	37.8	16.3	87.8	30.2		2.1		32.2	13.9	74.9

Appendix 1 (cont'd). Atlantic salmon density estimates and 95% confidence intervals for 1970-2004.

River	Site	Estimator	Removal Sweeps	Year	Month	Day	Density (fish per 100m²), variance, and/or upper and lower 95% CI									
							Age 0	lower	upper	Age 1	Var 1	Age 2+	Var 2+	Parr	lower	upper
Barnaby	131	CPUE		1995	9	1	95.9	41.3	222.7	19.3		4.8		24.2	10.4	56.1
Barnaby	131	CPUE		1996	9	17	39.7	17.1	92.0	7.8		0.0		7.8	3.3	18.2
Barnaby	131	CPUE		1997	8	25	55.5	23.9	128.8	33.0		1.3		34.3	14.7	79.6
Barnaby	131	CPUE		1998	8	18	22.9	9.9	53.2	17.7		5.1		22.9	9.9	53.1
Barnaby	131	CPUE		1999	9	1	39.1	16.9	90.7	43.3		2.3		45.6	19.6	106.2
Barnaby	131	CPUE		2000	9	8	90.6	38.8	211.6	7.1		3.6		10.6	4.6	24.7
Barnaby	131	CPUE		2001	9	11	22.9	9.9	53.4	17.2		0.0		17.2	7.4	40.1
Barnaby	131	CPUE		2002	9	9	64.9	27.8	151.2	10.0		2.2		12.2	5.2	28.3
Barnaby	131	CPUE		2003	9	26	17.8	7.6	41.4	10.1		0.0		10.1	4.4	23.6
Barnaby	131	CPUE		2004	9	29	45.3	19.5	105.6	0.0		8.3		8.3	3.6	19.4
Renous	47	Zippin	5	1970	8	10	3.5	3.5	3.5	2.1	-1.0	7.9	1.7	10.0		
Renous	47	Zippin	5	1971	7	23	3.5	3.5	3.5	8.2	n.a.	3.4	0.0	11.6		
Renous	47	Zippin	4	1972	7	14	3.1	n.a.	n.a.	2.6	0.0	1.7	0.1	4.3		
Renous	47	Zippin	5	1973	8	2	2.5	2.5	2.5	3.1	n.a.	0.0	0.0	3.1		
Renous	47	Zippin	5	1974	7	19	26.6	21.4	31.8	1.9	-1.0	0.4	n.a.	2.3		
Renous	47	Zippin	5	1975	7	17	3.4	n.a.	n.a.	12.1	n.a.	2.0	n.a.	14.1		
Renous	47	Zippin	5	1976	8	9	26.4	-43.5	96.3	10.7	115.5	1.5	0.0	12.2		
Renous	47	Zippin	5	1977	7	29	20.0	-11.9	52.0	9.4	3.9	1.2	n.a.	10.6		
Renous	47	Zippin	5	1978	7	11	11.0	9.6	12.4	7.4	0.0	1.7	-3.1	9.1		
Renous	47	Zippin	5	1982	10	20	0.0	n.a.	n.a.	10.9	0.1	1.9	0.0	12.8		
Renous	47	Zippin	5	1983	10	18	21.3	20.8	21.7	3.0	0.0	1.0	n.a.	4.0		
Renous	47	Zippin	4	1984	8	28	37.6	35.3	39.8	7.3	0.8	0.0	0.0	7.3		
Renous	47	CPUE		1993	8	30	7.9	3.4	18.6	9.8		0.0		9.8	4.2	22.9
Renous	48	Zippin	5	1970	8	17	7.5	7.4	7.6	1.7	n.a.	1.7	0.0	3.3		
Renous	48	Zippin	4	1971	7	15	7.0	4.0	10.1	3.8	0.2	0.0	0.0	3.8		
Renous	48	Zippin	5	1972	8	4	18.6	14.2	22.9	1.9	0.0	0.0	0.0	1.9		
Renous	48	Zippin	5	1973	8	10	9.1	6.5	11.6	2.1	-1.6	0.0	0.0	2.1		
Renous	48	Zippin	5	1974	8	16	51.3	47.8	55.0	2.1	0.0	0.0	0.0	2.1		
Renous	48	Zippin	5	1975	8	8	31.8	25.2	38.4	9.6	n.a.	0.0	0.0	9.6		
Renous	48	Zippin	5	1976	7	21	15.5	n.a.	n.a.	1.8	0.1	0.3	n.a.	2.1		
Renous	48	Zippin	5	1977	8	29	33.3	n.a.	n.a.	5.4	1.9	0.3	n.a.	5.7		
Renous	48	Zippin	4	1978	7	10	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0		
Renous	48	Zippin	5	1979	7	6	6.7	6.7	6.7	2.6	0.0	0.3	n.a.	2.9		
Renous	48	Zippin	5	1980	7	11	12.2	8.6	15.7	2.9	0.0	1.3	0.0	4.2		
Renous	48	Zippin	5	1981	7	24	23.8	22.2	25.5	3.6	0.0	0.0	0.0	3.6		
Renous	48	Zippin	4	1982	7	9	0.0	n.a.	n.a.	0.3	n.a.	0.3	n.a.	0.6		
Renous	48	Zippin	5	1983	7	22	8.3	7.3	9.3	1.5	0.0	1.2	-0.4	2.7		
Renous	48	Zippin	4	1984	8	1	12.2	n.a.	n.a.	3.3	0.0	0.0	0.0	3.3		
Renous	48	Zippin	4	1985	8	9	84.5	79.9	89.1	2.2	0.0	0.0	0.0	2.2		
Renous	48	Zippin	4	1986	7	11	41.4	28.4	54.4	9.5	-95.0	0.0	0.0	9.5		
Renous	48	CPUE		1993	8	27	67.9	29.2	157.5	10.1		0.0		10.1	4.3	23.5
Renous	48	CPUE		1994	8	4	52.4	22.6	121.6	31.8		2.8		34.6	14.9	80.5
Renous	48	CPUE		1996	9	9	146.2	62.8	340.6	16.9		1.7		18.5	8.0	43.0
Renous	48	CPUE		1997	8	29	95.1	40.9	220.9	31.7		3.1		34.8	15.0	81.0
Renous	48	CPUE		1998	8	17	88.3	38.0	205.1	35.5		0.0		35.5	15.3	82.4
Renous	48	CPUE		1999	8	25	72.3	31.2	167.9	19.2		2.8		22.1	9.5	51.2
Renous	48	CPUE		2000	9	6	151.8	64.6	356.3	18.4		3.2		21.6	9.3	50.2
Renous	48	CPUE		2001	9	5	91.7	39.2	214.2	58.5		1.5		60.0	25.5	141.2
Renous	48	CPUE		2002	9	12	111.9	47.8	262.0	29.8		2.9		32.7	14.0	76.3
Renous	48	CPUE		2003	9	15	56.0	24.1	130.6	30.5		4.2		34.8	14.9	81.1
Renous	48	CPUE		2004	9	17	136.4	58.2	319.8	30.4		6.6		37.0	15.9	86.4
Renous	49	Zippin	5	1970	8	26	18.7	18.7	18.8	2.1	0.0	1.7	0.0	3.8		
Renous	49	Zippin	5	1971	8	4	16.7	16.2	17.2	2.2	-1.1	0.0	0.0	2.2		
Renous	49	Zippin	5	1972	7	18	13.0	11.3	14.8	1.5	n.a.	0.3	0.0	1.7		
Renous	49	Zippin	5	1973	7	23	16.6	11.1	22.0	2.1	0.0	0.3	0.0	2.4		
Renous	49	Zippin	5	1974	6	28	80.8	72.2	89.4	12.1	n.a.	0.3	n.a.	12.4		
Renous	49	Zippin	5	1975	7	8	83.8	n.a.	n.a.	7.0	0.0	0.3	0.0	7.3		
Renous	49	Zippin	5	1976	7	6	95.6	n.a.	n.a.	2.4	0.0	0.5	0.0	2.9		
Renous	49	Zippin	5	1977	8	16	99.7	97.5	101.9	5.3	0.0	0.0	0.0	5.3		
Renous	49	Zippin	5	1978	7	25	70.5	67.0	74.0	7.8	1.5	0.8	0.0	8.6		
Renous	49	Zippin	5	1979	7	30	31.8	30.2	33.5	1.3	0.0	0.3	n.a.	1.6		
Renous	49	Zippin	5	1980	9	3	44.7	38.8	50.5	2.9	0.0	1.0	0.0	3.8		
Renous	49	Zippin	5	1981	8	12	73.3	70.3	76.3	1.6	0.0	1.6	0.1	3.3		
Renous	49	Zippin	5	1982	8	4	61.4	60.0	62.9	4.0	0.0	0.6	n.a.	4.7		
Renous	49	Zippin	5	1983	7	26	47.3	45.9	48.7	2.7	-1.7	0.0	0.0	2.7		
Renous	49	Zippin	4	1984	7	23	39.5	37.7	41.4	0.4	n.a.	0.0	0.0	0.4		
Renous	49	Zippin	4	1985	7	26	159.5	143.5	175.5	1.4	-1.9	1.4	0.0	2.8		

Appendix 1 (cont'd). Atlantic salmon density estimates and 95% confidence intervals for 1970-2004.

River	Site	Estimator	Removal Sweeps	Year	Month	Day	Density (fish per 100m²), variance, and/or upper and lower 95% CI									
							Age 0	lower	upper	Age 1	Var 1	Age 2+	Var 2+	Parr	lower	upper
Renous	49	Zippin	4	1986	8	13	90.9	80.2	101.6	3.3	0.0	0.0	0.0	3.3		
Renous	50	Zippin	5	1971	8	27	4.2	3.8	4.6	1.7	0.0	0.6	n.a.	2.3		
Renous	50	Zippin	5	1973	8	31	4.2	n.a.	n.a.	0.3	n.a.	0.0	0.0	0.3		
Renous	50	Zippin	5	1974	7	26	14.2	11.7	16.7	2.0	0.0	0.0	0.0	2.0		
Renous	50	Zippin	5	1975	7	22	16.6	13.6	19.6	9.6	0.4	0.0	n.a.	9.6		
Renous	50	CPUE		1995	8	21	123.6	53.1	287.7	20.2		2.8		23.0	9.9	53.5
Renous	51	Zippin	5	1970	8	14	1.5	n.a.	n.a.	1.2	0.0	4.1	n.a.	5.3		
Renous	51	Zippin	5	1971	7	8	2.5	n.a.	n.a.	0.0	0.0	0.0	0.0	0.0		
Renous	51	Zippin	4	1973	8	14	2.5	2.5	2.5	0.4	n.a.	0.0	0.0	0.4		
Renous	51	CPUE		1993	8	27	59.5	25.6	138.0	23.4		0.0		23.4	10.1	54.4
Renous	52	Zippin	5	1972	8	22	0.8	0.7	0.8	1.9	n.a.	0.5	0.0	2.3		
Renous	52	Zippin	5	1973	7	16	4.0	3.6	4.3	0.0	0.0	0.3	n.a.	0.3		
Renous	52	Zippin	5	1974	7	10	84.6	-10.9	180.2	0.0	0.0	0.0	0.0	0.0		
Renous	52	Zippin	5	1975	7	11	37.1	32.3	42.0	1.2	0.0	0.0	0.0	1.2		
Renous	52	Zippin	5	1976	7	12	5.9	3.2	8.6	1.7	0.0	0.4	n.a.	2.1		
Renous	52	Zippin	5	1977	8	24	38.2	34.2	42.1	7.0	206.4	0.5	-0.7	7.5		
Renous	52	Zippin	4	1978	7	11	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0		
Renous	52	Zippin	5	1982	10	20	3.2	3.1	3.3	2.5	0.0	0.7	n.a.	3.2		
Renous	52	Zippin	5	1983	10	19	11.8	10.2	13.3	0.3	n.a.	0.7	n.a.	1.0		
Renous	52	Zippin	4	1984	8	27	27.4	n.a.	n.a.	0.0	0.0	0.4	n.a.	0.4		
Renous	52	CPUE		1993	8	30	10.2	4.3	23.7	12.2		0.0		12.2	5.3	28.4
Renous	52	CPUE		1994	8	12	39.2	16.9	90.8	19.1		0.0		19.1	8.2	44.3
Renous	52	CPUE		1997	8	29	51.4	22.2	119.2	19.3		0.0		19.3	8.3	44.8
Renous	52	CPUE		1998	8	17	35.1	15.1	81.3	11.2		0.0		11.2	4.8	26.0
Renous	52	CPUE		1999	8	25	19.6	8.4	45.5	18.5		3.3		21.7	9.4	50.4
Renous	52	CPUE		2000	9	7	40.0	17.2	93.0	8.9		3.2		12.1	5.2	28.2
Renous	52	CPUE		2001	9	13	43.8	18.8	101.8	33.1		2.0		35.2	15.1	82.1
Renous	52	CPUE		2002	9	23	83.8	35.9	195.6	23.5		3.4		26.9	11.6	62.7
Renous	52	CPUE		2003	9	15	6.9	2.9	16.1	14.4		1.0		15.4	6.6	35.8
Renous	53	Zippin	5	1973	8	17	22.9	21.6	24.3	4.5	1.1	1.9	0.0	6.4		
Renous	53	Zippin	5	1974	7	29	36.6	27.3	46.0	7.1	n.a.	0.4	n.a.	7.5		
Renous	53	Zippin	5	1975	8	7	30.3	26.1	34.6	16.1	0.6	1.8	0.0	17.9		
Renous	53	Zippin	5	1976	9	8	27.7	n.a.	n.a.	11.8	5.3	1.9	-0.8	13.7		
Renous	53	Zippin	5	1977	8	5	38.3	34.0	42.5	13.5	1.7	6.1	93.5	19.5		
Renous	53	Zippin	5	1978	7	19	11.6	7.9	15.4	9.7	16.5	1.4	n.a.	11.1		
Renous	53	Zippin	5	1979	7	31	2.7	n.a.	n.a.	2.1	0.0	0.4	n.a.	2.5		
Renous	53	Zippin	5	1980	9	10	19.7	18.3	21.1	0.7	0.0	1.0	0.0	1.7		
Renous	53	Zippin	5	1981	7	30	15.8	12.4	19.2	3.8	0.0	0.0	n.a.	3.8		
Renous	53	Zippin	5	1982	7	14	8.6	6.9	10.4	3.0	0.0	0.7	0.0	3.7		
Renous	53	Zippin	5	1983	7	11	5.6	4.9	6.3	8.8	1.5	3.1	0.0	11.9		
Renous	53	Zippin	4	1984	7	23	14.8	14.4	15.2	2.2	0.0	0.4	n.a.	2.6		
Renous	53	CPUE		1993	8	30	43.2	18.6	100.3	5.0		0.0		5.0	2.1	11.7
Renous	54	Zippin	5	1970	8	24	0.0	n.a.	n.a.	1.3	0.0	4.0	0.2	5.4		
Renous	54	Zippin	3	1994	8	4	34.9	28.8	41.0	12.6		1.0		13.5	11.0	16.1
Renous	54	Zippin	3	1995	8	22	119.6	112.4	126.9	24.6		2.3		27.0	10.8	43.1
Renous	54	CPUE		1996	9	9	79.3	34.2	184.1	20.4		0.8		21.1	9.1	49.0
Renous	54	CPUE		1997	8	29	70.4	30.4	163.5	30.0		0.0		30.0	12.9	69.6
Renous	54	CPUE		1998	8	17	66.3	28.6	154.0	42.6		1.1		43.7	18.8	101.7
Renous	54	CPUE		1999	8	24	58.2	25.1	135.1	27.1		0.9		28.0	12.0	64.9
Renous	54	CPUE		2000	9	6	87.7	37.5	204.8	24.9		6.7		31.6	13.6	73.7
Renous	54	CPUE		2001	9	5	74.7	32.0	174.2	28.0		2.0		30.1	12.9	70.0
Renous	54	CPUE		2002	9	23	129.8	55.4	304.1	23.0		5.0		28.0	12.0	65.2
Renous	54	CPUE		2004	9	17	141.4	60.3	331.6	12.5		14.3		26.9	11.5	62.5
Renous	116	CPUE		1994	8	12	23.1	9.9	53.6	16.4		0.9		17.3	7.5	40.1
Renous	116	CPUE		1995	8	21	61.2	26.4	142.1	8.3		0.0		8.3	3.6	19.5
Renous	116	CPUE		1996	9	9	46.9	20.2	108.6	11.3		0.0		11.3	4.9	26.3
Renous	116	CPUE		2004	9	17	20.9	9.0	48.6	28.9		17.9		46.9	20.0	109.8
Renous	156	Zippin	3	1988	8	22	45.6	n.a.	n.a.					23.7	n.a.	n.a.
Renous	199	CPUE		1998	8	17	101.7	43.7	236.3	33.8		1.3		35.1	15.1	81.7
Renous	209	CPUE		2002	10	1	66.4	28.5	154.9	0.0		0.0		0.0	n.a.	n.a.
Renous	214	Zippin		1988	8	23	25.0	n.a.	n.a.					1.4	n.a.	n.a.
Renous	214	CPUE		1994	8	12	42.4	18.3	98.3	11.5		2.3		13.9	6.0	32.2
Renous	214	CPUE		1996	9	9	0.0	n.a.	n.a.	25.4		2.4		27.7	11.9	64.3
Renous	214	CPUE		1997	8	29	36.1	15.6	83.7	0.0		0.0		0.0	n.a.	n.a.
Renous	214	CPUE		1998	8	17	38.7	16.7	89.8	9.7		1.7		11.4	4.9	26.5
Renous	214	CPUE		1999	8	28	35.5	15.3	82.4	13.5		3.0		16.4	7.1	38.1
Renous	214	CPUE		2000	9	6	78.4	33.6	182.9	8.5		6.9		15.5	6.7	35.9

Appendix 1 (cont'd). Atlantic salmon density estimates and 95% confidence intervals for 1970-2004.

			Removal				Density (fish per 100m²), variance, and/or upper and lower 95% CI									
River	Site	Estimator	Sweeps	Year	Month	Day	Age 0	lower	upper	Age 1	Var 1	Age 2+	Var 2+	Parr	lower	upper
Renous	214	CPUE		2001	8	30	3.9	1.7	9.2	21.1		0.8		22.0	9.4	51.1
Renous	214	CPUE		2002	9	23	0.0	n.a.	n.a.	7.5		3.2		10.7	4.6	24.9
Renous	214	CPUE		2003	9	15	0.0	n.a.	n.a.	8.6		7.0		15.5	6.7	36.1
Renous	214	CPUE		2004	9	17	41.7	17.9	97.0	12.1		0.0		12.1	5.2	28.2
Dungarvon	54	CPUE		2003	9	15	44.0	18.9	102.4	24.5		2.0		26.4	11.4	61.6
Dungarvon	55	Zippin	5	1974	9	6	21.9	17.0	26.8	7.9	-170.9	0.0	0.0	7.9		
Dungarvon	55	Zippin	5	1975	8	20	27.4	24.0	30.7	11.0	11.9	3.7	0.0	14.7		
Dungarvon	55	Zippin	5	1977	8	25	63.1	59.3	67.0	8.2	3.9	4.5	0.3	12.7		
Dungarvon	55	Zippin	5	1978	8	1	52.3	32.0	72.7	11.7	0.6	0.0	0.0	11.7		
Dungarvon	55	Zippin	4	1979	7	13	0.0	n.a.	n.a.	0.0	0.0	0.0	0.0	0.0		
Dungarvon	55	Zippin	5	1980	7	8	6.1	4.3	8.0	0.4	n.a.	1.3	-0.5	1.7		
Dungarvon	55	Zippin	5	1981	7	13	9.3	4.5	14.1	1.7	-0.7	0.0	0.0	1.7		
Dungarvon	55	Zippin	4	1982	7	12	0.8	n.a.	n.a.	0.5	0.0	0.0	0.0	0.5		
Dungarvon	55	Zippin	5	1983	7	25	16.3	14.9	17.7	2.3	0.3	0.7	n.a.	3.0		
Dungarvon	55	Zippin	4	1984	7	27	2.8	2.5	3.0	5.6	0.3	0.0	0.0	5.6		
Dungarvon	55	CPUE		1993	8	31	38.3	16.5	89.0	22.2		4.5		26.8	11.5	62.1
Dungarvon	55	CPUE		1994	8	16	85.1	36.6	197.6	27.2		0.0		27.2	11.7	63.1
Dungarvon	55	Zippin	3	1995	8	30	108.5	103.0	114.0	27.7		5.4		33.1	n.a.	n.a.
Dungarvon	55	Zippin	3	1996	9	5	76.0	65.5	86.5	6.7		1.4		7.1	n.a.	n.a.
Dungarvon	55	Zippin	3	1997	9	16	57.4	50.3	64.4	37.8		4.6		42.4	34.8	50.0
Dungarvon	55	Zippin	4	1998	8	19	40.9	36.1	45.7	29.7		4.9		34.5	29.7	39.4
Dungarvon	55	Zippin	3	1999	8	26	94.3	74.2	114.4	11.1		1.8		12.9	11.8	14.1
Dungarvon	55	CPUE		2000	8	29	56.5	24.2	131.5	18.6		2.6		21.1	9.1	49.2
Dungarvon	55	CPUE		2001	9	4	36.2	15.6	84.3	41.4		3.8		45.2	19.3	105.8
Dungarvon	55	CPUE		2002	9	17	64.4	27.6	150.2	19.3		2.4		21.7	9.3	50.5
Dungarvon	55	CPUE		2003	9	16	18.7	8.0	43.6	14.1		0.0		14.1	6.1	32.7
Dungarvon	55	CPUE		2004	9	15	59.8	25.6	139.2	15.7		14.3		29.9	12.9	69.7
Dungarvon	56	Zippin	5	1974	9	9	43.1	n.a.	n.a.	1.4	0.0	0.0	0.0	1.4		
Dungarvon	56	Zippin	5	1975	8	29	50.2	49.4	51.0	5.1	n.a.	0.0	0.0	5.1		
Dungarvon	56	Zippin	5	1976	8	25	24.6	11.2	38.0	0.7	n.a.	0.0	0.0	0.7		
Dungarvon	56	Zippin	5	1977	8	18	43.4	41.1	45.6	4.1	n.a.	1.2	-2.0	5.4		
Dungarvon	56	Zippin	5	1978	7	13	17.4	n.a.	n.a.	5.3	1.0	0.7	0.0	6.0		
Dungarvon	56	Zippin	5	1979	7	19	9.4	5.7	13.2	0.3	n.a.	0.0	0.0	0.3		
Dungarvon	56	Zippin	5	1982	9	28	2.1	n.a.	n.a.	0.0	0.0	0.0	0.0	0.0		
Dungarvon	56	Zippin	4	1983	8	17	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0		
Dungarvon	56	Zippin	4	1984	7	26	7.1	7.0	7.1	0.5	n.a.	0.0	0.0	0.5		
Dungarvon	56	CPUE		1993	8	31	48.6	21.0	112.7	32.8		5.2		38.0	16.4	88.5
Dungarvon	57	Zippin	5	1974	9	10	64.1	62.1	66.2	6.1	0.2	0.0	0.0	6.1		
Dungarvon	57	Zippin	5	1975	8	22	43.2	40.8	45.6	4.0	0.0	0.9	0.0	4.9		
Dungarvon	57	Zippin	5	1976	8	25	12.0	n.a.	n.a.	4.5	n.a.	0.0	0.0	4.5		
Dungarvon	57	Zippin	5	1977	8	17	44.3	41.0	47.5	1.4	n.a.	0.3	n.a.	1.7		
Dungarvon	57	Zippin	5	1978	7	13	21.0	19.6	22.4	5.3	0.8	0.8	n.a.	6.2		
Dungarvon	57	Zippin	5	1979	7	18	3.8	2.6	4.9	0.0	0.0	0.0	0.0	0.0		
Dungarvon	57	Zippin	5	1980	7	29	8.5	7.4	9.6	0.0	0.0	1.4	n.a.	1.4		
Dungarvon	57	Zippin	5	1981	8	17	29.0	26.8	31.2	0.0	0.0	1.5	0.0	1.5		
Dungarvon	57	Zippin	5	1982	8	3	12.7	10.0	15.4	1.2	n.a.	1.5	0.0	2.7		
Dungarvon	57	Zippin	5	1983	8	3	17.6	17.2	18.0	0.4	n.a.	0.0	0.0	0.4		
Dungarvon	57	Zippin	4	1984	7	26	10.2	5.8	14.6	1.0	n.a.	0.3	n.a.	1.3		
Dungarvon	57	CPUE		1993	8	31	57.9	25.0	134.3	10.9		0.0		10.9	4.7	25.3
Dungarvon	57	CPUE		1994	8	16	36.4	15.7	84.5	17.0		3.7		20.7	8.9	48.1
Dungarvon	57	CPUE		1996	9	5	101.2	43.6	235.3	5.5		0.3		5.9	2.5	13.7
Dungarvon	57	CPUE		1997	9	15	64.8	27.9	150.4	44.1		0.8		44.9	19.3	104.6
Dungarvon	57	CPUE		1998	8	18	88.3	38.0	205.1	25.8		0.0		25.8	11.1	59.9
Dungarvon	57	CPUE		1999	8	25	118.1	50.8	274.7	34.5		1.1		35.7	15.4	83.0
Dungarvon	57	CPUE		2000	8	2	38.1	16.4	88.7	0.0		0.0		0.0	n.a.	n.a.
Dungarvon	57	CPUE		2001	9	5	102.0	43.6	238.6	15.8		0.9		16.7	7.2	38.8
Dungarvon	57	CPUE		2002	9	20	98.2	42.0	229.5	20.0		0.8		20.8	9.0	48.4
Dungarvon	57	CPUE		2003	9	16	32.3	13.9	75.1	24.5		0.8		25.3	10.9	58.8
Dungarvon	57	CPUE		2004	9	20	58.7	25.2	136.8	14.7		2.1		16.8	7.2	38.9
Dungarvon	117	CPUE		1994	8	16	69.5	29.9	161.2	27.5		0.8		28.3	12.2	65.7
Dungarvon	117	CPUE		1995	8	21	141.1	60.6	328.6	33.8		3.3		37.1	16.0	86.3
Dungarvon	117	CPUE		1996	8	9	113.8	48.9	264.6	25.6		3.2		28.8	12.4	67.0
Dungarvon	117	CPUE		1997	9	15	72.0	31.0	167.1	65.4		2.8		68.1	29.1	159.6
Dungarvon	117	CPUE		1998	8	17	89.9	38.7	208.8	20.9		1.4		22.4	9.6	51.9
Dungarvon	117	CPUE		1999	8	25	53.9	23.2	125.0	48.1		2.1		50.2	21.5	117.2
Dungarvon	117	CPUE		2000	8	2	109.9	47.0	257.2	43.6		10.0		53.6	22.8	125.8
Dungarvon	117	CPUE		2001	9	5	92.3	39.5	215.7	36.5		0.7		37.3	16.0	87.0

Appendix 1 (cont'd). Atlantic salmon density estimates and 95% confidence intervals for 1970-2004.

			Removal				Density (fish per $100m^2$), variance, and/or upper and lower 95% CI									
River	Site	Estimator	Sweeps	Year	Month	Day	Age 0	lower	upper	Age 1	Var 1	Age 2+	Var 2+	Parr	lower	upper
Dungarvon	117	CPUE		2002	9	13	132.9	56.7	311.4	21.8		3.8		25.6	11.0	59.6
Dungarvon	117	CPUE		2003	9	22	41.2	17.7	95.9	44.5		4.2		48.8	20.8	114.3
Dungarvon	117	CPUE		2004	9	20	33.7	14.5	78.4	15.7		20.0		35.8	15.3	83.4
Dungarvon	123	CPUE		1994	8	22	0.0	n.a.	n.a.	12.1		6.8		18.9	8.1	43.8
Dungarvon	186	CPUE		1997	9	24	71.3	30.7	165.5	20.6		4.2		24.8	10.7	57.6
Dungarvon	186	CPUE		1998	8	11	0.0	n.a.	n.a.	27.8		3.9		31.7	13.6	73.6
Dungarvon	186	CPUE		1999	8	28	101.0	43.4	234.7	0.0		12.1		12.1	5.2	28.2
Dungarvon	186	CPUE		2000	9	7	160.3	68.2	376.6	39.4		4.0		43.4	18.6	101.6
Dungarvon	186	CPUE		2001	8	30	66.8	28.6	155.7	55.3		4.4		59.7	25.4	140.3
Dungarvon	186	CPUE		2002	9	23	0.0	n.a.	n.a.	28.7		9.0		37.7	16.2	88.1
Dungarvon	186	CPUE		2003	9	15	24.8	10.7	57.7	24.7		9.8		34.6	14.8	80.7
Dungarvon	186	CPUE		2004	9	7	86.0	36.8	200.8	7.4		14.9		22.3	9.6	51.9
Dungarvon	188	CPUE		1997	8	27	226.8	97.0	530.4	43.7		5.3		49.0	21.0	114.4
Dungarvon	210	CPUE		1996	9	5	144.7	62.1	337.0	31.4		4.6		36.0	15.5	83.7
Dungarvon	210	CPUE		1997	9	17	79.4	34.2	184.3	48.0		3.5		51.5	22.1	120.1
Dungarvon	210	CPUE		1998	8	11	55.4	23.9	128.5	39.4		5.0		44.4	19.1	103.4
Dungarvon	210	CPUE		1999	8	31	105.1	45.2	244.3	73.2		8.4		81.6	34.7	191.7
Dungarvon	210	CPUE		2000	8	3	69.1	29.6	161.1	46.7		5.7		52.4	22.3	122.9
Dungarvon	210	CPUE		2001	9	4	74.4	31.9	173.6	55.4		4.4		59.8	25.4	140.7
Dungarvon	210	CPUE		2002	9	17	99.7	42.7	233.2	32.0		8.4		40.4	17.3	94.5
Dungarvon	210	CPUE		2003	9	11	38.0	16.4	88.5	43.0		1.3		44.3	18.9	103.6
Dungarvon	210	CPUE		2004	9	15	89.7	38.4	209.5	37.8		14.6		52.4	22.4	123.1
SW Miramichi	58	Zippin	4	1970	7	28	23.1	19.5	26.8	2.0	0.9	2.0	0.5	4.0		
SW Miramichi	58	Zippin	5	1971	7	27	39.1	36.8	41.4	10.8	0.4	0.9	0.0	11.7		
SW Miramichi	58	Zippin	5	1972	8	2	2.8	1.6	3.9	6.2	8.3	2.5	1.9	8.7		
SW Miramichi	58	Zippin	5	1973	8	27	48.5	47.3	49.8	4.6	0.0	0.8	0.0	5.4		
SW Miramichi	58	Zippin	5	1974	8	15	22.3	8.5	36.1	14.3	2.8	0.3	n.a.	14.6		
SW Miramichi	58	Zippin	5	1975	8	1	50.0	n.a.	n.a.	23.8	n.a.	10.0	0.2	33.8		
SW Miramichi	58	Zippin	5	1976	7	26	23.4	n.a.	n.a.	15.2	2.1	3.1	0.2	18.3		
SW Miramichi	58	Zippin	5	1977	8	10	182.3	157.8	206.8	12.7	n.a.	4.5	1248.7	17.2		
SW Miramichi	58	Zippin	5	1978	8	21	24.3	22.7	26.0	8.8	0.5	0.0	0.0	8.8		
SW Miramichi	58	Zippin	5	1982	10	19	43.4	42.7	44.1	5.5	0.0	2.6	n.a.	8.2		
SW Miramichi	58	Zippin	5	1983	10	26	126.1	n.a.	n.a.	0.0	0.0	0.3	n.a.	0.3		
SW Miramichi	58	Zippin	4	1984	9	6	102.5	89.8	115.1	3.4	0.0	3.4	-19.2	6.9		
SW Miramichi	58	Zippin	4	1985	9	10	88.4	84.2	92.7	8.2	0.0	2.2	-22.8	10.5		
SW Miramichi	58	CPUE		1993	9	9	115.3	49.6	268.1	27.6		1.4		29.0	12.5	67.4
SW Miramichi	58	CPUE		1994	8	18	96.9	41.7	225.2	57.4		3.5		61.0	26.1	142.6
SW Miramichi	58	CPUE		1996	9	11	191.7	82.1	447.6	77.7		7.1		84.8	36.1	199.4
SW Miramichi	58	CPUE		1997	9	18	96.2	41.4	223.5	46.6		2.8		49.3	21.2	115.0
SW Miramichi	58	CPUE		1998	8	27	86.8	37.4	201.6	31.4		3.6		35.0	15.1	81.4
SW Miramichi	58	CPUE		1999	8	31	130.4	56.0	303.4	36.6		3.6		40.2	17.3	93.6
SW Miramichi	58	CPUE		2000	8	10	102.0	43.6	238.4	38.4		5.1		43.5	18.6	101.7
SW Miramichi	58	CPUE		2001	9	4	114.7	49.0	268.4	30.0		0.7		30.7	13.2	71.5
SW Miramichi	58	CPUE		2002	9	11	177.2	75.4	416.9	32.0		5.8		37.8	16.2	88.3
SW Miramichi	58	CPUE		2003	9	22	64.4	27.6	150.0	34.3		0.7		35.1	15.0	81.8
SW Miramichi	58	CPUE		2004	9	21	66.9	28.7	156.0	22.3		5.1		27.4	11.8	63.8
SW Miramichi	59	Zippin	5	1970	7	29	10.8	8.5	13.1	5.2	20.1	11.1	9.5	16.3		
SW Miramichi	59	Zippin	5	1971	8	5	10.5	9.6	11.3	8.7	4.0	3.4	0.0	12.1		
SW Miramichi	59	Zippin	5	1972	7	24	2.4	n.a.	n.a.	6.2	8.9	2.6	0.0	8.8		
SW Miramichi	59	Zippin	5	1973	7	30	9.9	-2.7	22.5	2.0	n.a.	0.6	0.0	2.6		
SW Miramichi	59	Zippin	5	1974	9	5	34.0	n.a.	n.a.	15.0	0.5	1.3	0.0	16.2		
SW Miramichi	59	Zippin	5	1975	9	4	67.0	64.2	69.7	52.7	1.7	8.1	0.0	60.8		
SW Miramichi	59	Zippin	5	1977	8	29	59.9	52.3	67.4	19.3	199.9	3.5	-1.5	22.8		
SW Miramichi	59	Zippin	5	1978	8	17	27.2	23.1	31.3	13.7	1.2	0.4	0.0	14.0		
SW Miramichi	59	Zippin	5	1979	9	18	5.9	n.a.	n.a.	0.0	0.0	0.5	0.0	0.5		
SW Miramichi	59	Zippin	5	1980	9	11	53.1	n.a.	n.a.	2.1	0.1	1.7	n.a.	3.9		
SW Miramichi	59	Zippin	5	1982	9	28	13.1	-4.6	30.8	4.4	0.0	0.0	0.0	4.4		
SW Miramichi	59	Zippin	5	1983	9	6	30.5	27.9	33.0	1.6	-2.6	1.6	n.a.	3.1		
SW Miramichi	59	Zippin	4	1984	8	21	26.5	n.a.	n.a.	3.9	34.7	2.1	0.0	6.0		
SW Miramichi	59	CPUE		1993	9	2	52.6	22.7	122.1	7.6		2.2		9.8	4.2	22.9
SW Miramichi	60	Zippin	4	1970	7	30	0.4	n.a.	n.a.	0.0	0.0	1.3	n.a.	1.3		
SW Miramichi	60	Zippin	5	1971	7	20	22.2	18.4	26.1	3.0	0.0	0.0	-0.5	3.0		
SW Miramichi	60	Zippin	5	1972	7	27	5.5	3.2	7.7	1.9	n.a.	1.2	-0.4	3.1		
SW Miramichi	60	Zippin	5	1973	8	1	23.8	16.2	31.4	0.4	n.a.	0.0	0.0	0.4		
SW Miramichi	60	Zippin	5	1974	7	3	56.5	35.1	78.0	2.6	-1.6	0.0	0.0	2.6		
SW Miramichi	60	Zippin	5	1975	7	9	64.8	n.a.	n.a.	14.1	n.a.	0.7	n.a.	14.9		
SW Miramichi	60	Zippin	5	1976	7	5	24.8	21.6	27.9	4.3	n.a.	0.9	0.0	5.2		

Appendix 1 (cont'd). Atlantic salmon density estimates and 95% confidence intervals for 1970-2004.

			Removal				Density (fish per 100m²), variance, and/or upper and lower 95% CI									
River	Site	Estimator	Sweeps	Year	Month	Day	Age 0	lower	upper	Age 1	Var 1	Age 2+	Var 2+	Parr	lower	upper
SW Miramichi	60	Zippin	5	1977	7	27	44.3	38.5	50.0	2.1	-1.0	0.3	n.a.	2.4		
SW Miramichi	60	Zippin	5	1978	8	10	3.4	n.a.	n.a.	0.0	0.0	0.0	0.0	0.0		
SW Miramichi	60	Zippin	5	1979	8	3	4.4	-3.5	12.3	0.9	-0.3	0.9	0.0	1.8		
SW Miramichi	60	Zippin	5	1980	8	21	7.1	4.8	9.3	0.4	n.a.	0.0	0.0	0.4		
SW Miramichi	60	Zippin	5	1981	8	5	39.6	36.0	43.2	1.2	0.0	0.3	n.a.	1.5		
SW Miramichi	60	Zippin	5	1982	8	6	10.2	7.4	12.9	2.3	0.0	1.4	0.0	3.7		
SW Miramichi	60	Zippin	5	1983	8	11	16.5	15.6	17.4	0.0	0.0	0.0	0.0	0.0		
SW Miramichi	60	Zippin	4	1984	8	16	15.3	13.0	17.6	1.1	0.0	0.0	0.0	1.1		
SW Miramichi	60	Zippin	4	1985	8	15	45.1	41.0	49.3	1.9	0.0	0.8	n.a.	2.6		
SW Miramichi	60	Zippin	4	1986	8	15	21.5	15.8	27.3	0.8	n.a.	0.8	n.a.	1.6		
SW Miramichi	60	Zippin	4	1987	7	14	39.4	30.2	48.6	2.4	-1.3	0.0	0.0	2.4		
SW Miramichi	60	Zippin	4	1988	7	13	78.9	73.2	84.6	0.6	n.a.	0.0	0.0	0.6		
SW Miramichi	60	Zippin	4	1989	7	19	150.9	138.0	163.8	3.9	n.a.	0.0	0.0	3.9		
SW Miramichi	60	Zippin	4	1990	7	17	126.1	109.6	142.6	4.0	n.a.	0.0	0.0	4.0		
SW Miramichi	60	Zippin	4	1992	7	22	49.0	42.5	55.5	15.1	829.1	2.8	n.a.	18.0		
SW Miramichi	60	Zippin	3	1993	7	23	118.2	98.0	138.3	5.8		0.0		5.8	n.a.	n.a.
SW Miramichi	60	Zippin	3	1994	8	25	44.2	39.9	48.5	6.2		5.2		11.4	n.a.	n.a.
SW Miramichi	60	CPUE		1995	8	17	81.1	34.9	188.3	17.1		0.7		17.8	7.7	41.4
SW Miramichi	60	CPUE		1996	9	11	129.3	55.5	300.8	19.0		0.0		19.0	8.2	44.1
SW Miramichi	60	CPUE		1997	9	18	133.3	57.2	310.3	45.9		0.0		45.9	19.7	106.9
SW Miramichi	60	CPUE		1998	8	27	94.3	40.6	219.2	9.9		0.0		9.9	4.2	23.0
SW Miramichi	60	CPUE		1999	8	31	53.1	22.9	123.2	92.7		6.9		99.7	42.2	235.1
SW Miramichi	60	CPUE		2000	8	9	68.0	29.1	158.5	15.3		1.9		17.2	7.4	40.0
SW Miramichi	60	CPUE		2001	8	31	66.6	28.6	155.2	34.5		3.4		37.9	16.2	88.5
SW Miramichi	60	CPUE		2002	9	11	112.7	48.2	263.8	34.2		3.7		37.9	16.2	88.4
SW Miramichi	60	CPUE		2003	9	11	45.1	19.4	104.9	19.0		1.4		20.4	8.8	47.5
SW Miramichi	60	CPUE		2004	9	15	41.2	17.7	95.9	17.7		8.9		26.6	11.4	61.9
SW Miramichi	61	Zippin	5	1970	7	31	9.4	n.a.	n.a.	0.4	0.0	4.4	-15.8	4.9		
SW Miramichi	61	Zippin	4	1971	7	22	2.7	2.5	2.9	0.0	0.0	0.0	0.0	0.0		
SW Miramichi	61	Zippin	4	1972	7	13	2.1	-0.4	4.6	0.8	0.0	0.0	0.0	0.8		
SW Miramichi	61	Zippin	5	1973	7	27	18.4	9.8	27.1	0.4	0.0	2.6	-1.6	3.0		
SW Miramichi	61	Zippin	5	1974	7	3	19.1	10.6	27.5	0.0	0.0	2.8	n.a.	2.8		
SW Miramichi	61	Zippin	5	1975	7	15	37.7	26.7	48.7	1.3	n.a.	1.3	0.0	2.5		
SW Miramichi	61	Zippin	5	1976	8	31	3.3	n.a.	n.a.	0.0	0.0	0.0	0.0	0.0		
SW Miramichi	61	Zippin	5	1977	9	7	48.1	44.5	51.7	4.2	0.0	0.0	0.0	4.2		
SW Miramichi	61	Zippin	5	1978	7	18	11.6	4.6	18.6	0.0	0.0	3.5	n.a.	3.5		
SW Miramichi	61	Zippin	4	1982	10	6	0.4	n.a.	n.a.	0.0	0.0	0.0	0.0	0.0		
SW Miramichi	61	Zippin	5	1983	10	24	2.1	2.1	2.1	0.0	0.0	0.0	0.0	0.0		
SW Miramichi	61	Zippin	4	1984	8	29	2.1	2.1	2.1	0.0	0.0	0.0	0.0	0.0		
SW Miramichi	61	CPUE		1993	9	1	37.3	16.1	86.6	3.2		2.5		5.7	2.4	13.4
SW Miramichi	61	CPUE		1998	8	24	36.5	15.7	84.6	0.0		0.0		0.0	n.a.	n.a.
SW Miramichi	61	CPUE		1999	9	2	276.3	117.9	647.6	12.1		0.0		12.1	5.2	28.2
SW Miramichi	61	CPUE		2000	8	2	70.0	30.0	163.2	6.6		0.0		6.6	2.8	15.5
SW Miramichi	61	CPUE		2001	9	10	91.1	39.0	212.9	12.6		1.8		14.4	6.2	33.5
SW Miramichi	61	CPUE		2002	9	10	43.5	18.7	101.2	0.0		0.0		0.0	n.a.	n.a.
SW Miramichi	61	CPUE		2003	9	10	47.5	20.4	110.5	3.7		0.0		3.7	1.6	8.8
SW Miramichi	61	CPUE		2004	9	13	25.0	10.7	58.1	0.0		0.0		0.0	n.a.	n.a.
SW Miramichi	62	Zippin	5	1970	8	5	18.2	17.2	19.2	3.8	-46.5	4.1	5.5	7.9		
SW Miramichi	62	Zippin	5	1971	7	7	18.3	16.0	20.6	4.1	2.0	2.9	n.a.	7.0		
SW Miramichi	62	Zippin	5	1972	7	11	1.8	n.a.	n.a.	0.8	n.a.	0.0	0.0	0.8		
SW Miramichi	62	Zippin	5	1973	7	24	2.6	n.a.	n.a.	0.0	0.0	0.3	n.a.	0.3		
SW Miramichi	62	Zippin	4	1974	7	4	1.3	1.3	1.3	0.3	n.a.	0.0	0.0	0.3		
SW Miramichi	62	Zippin	5	1975	7	10	47.9	45.7	50.2	1.5	n.a.	0.0	0.0	1.5		
SW Miramichi	62	Zippin	5	1976	7	7	15.7	n.a.	n.a.	2.7	n.a.	0.5	0.0	3.3		
SW Miramichi	62	Zippin	5	1977	7	20	43.7	n.a.	n.a.	2.7	n.a.	0.3	n.a.	3.1		
SW Miramichi	62	Zippin	5	1978	8	21	4.9	4.0	5.8	0.4	n.a.	0.0	0.0	0.4		
SW Miramichi	62	Zippin	5	1979	9	24	17.6	16.3	19.0	5.2	0.7	2.6	0.0	7.8		
SW Miramichi	62	Zippin	5	1980	8	13	19.3	17.8	20.7	0.4	n.a.	0.4	n.a.	0.7		
SW Miramichi	62	Zippin	5	1981	9	14	81.9	78.0	85.7	2.0	0.0	4.0	0.0	6.0		
SW Miramichi	62	Zippin	5	1982	8	16	10.8	10.7	10.8	9.8	0.0	0.0	0.0	9.8		
SW Miramichi	62	Zippin	5	1983	8	31	35.8	34.5	37.1	1.1	0.0	0.0	0.0	1.1		
SW Miramichi	62	Zippin	4	1984	8	20	38.6	33.7	43.4	13.3	n.a.	2.0	0.0	15.3		
SW Miramichi	62	Zippin	4	1985	8	7	84.9	78.5	91.3	2.7	n.a.	0.0	0.0	2.7		
SW Miramichi	62	Zippin	4	1986	9	5	77.9	69.8	86.1	21.9	0.9	0.0	0.0	21.9		
SW Miramichi	62	Zippin	4	1987	7	7	7.6	5.9	9.3	1.3	-0.5	0.9	0.0	2.2		
SW Miramichi	62	Zippin	4	1988	7	5	30.9	24.3	37.4	1.8	n.a.	0.0	-1.0	1.8		
SW Miramichi	62	Zippin	4	1989	6	29	30.9	n.a.	n.a.	2.4	n.a.	0.0	0.0	2.4		

Appendix 1 (cont'd). Atlantic salmon density estimates and 95% confidence intervals for 1970-2004.

River	Site	Estimator	Removal Sweeps	Year	Month	Day	Density (fish per 100m²), variance, and/or upper and lower 95% CI									
							Age 0	lower	upper	Age 1	Var 1	Age 2+	Var 2+	Parr	lower	upper
SW Miramichi	62	Zippin	4	1990	7	12	108.0	93.2	122.9	3.9	0.0	0.7	0.1	4.6		
SW Miramichi	62	Zippin	4	1992	7	23	37.8	33.4	42.2	7.1	-40.5	0.0	0.0	7.1		
SW Miramichi	62	Zippin	4	1993	8	12	77.3	64.7	89.9	3.0		0.0		3.0	n.a.	n.a.
SW Miramichi	62	Zippin	3	1994	8	23	94.7	84.8	104.6	29.3		1.1		30.4	25.1	35.7
SW Miramichi	62	CPUE		1995	8	17	129.6	55.7	301.6	27.5		1.0		28.5	12.3	66.1
SW Miramichi	62	CPUE		1996	9	4	149.5	64.1	348.2	32.0		3.3		35.4	15.2	82.2
SW Miramichi	62	CPUE		1997	9	17	108.1	46.5	251.2	31.5		1.0		32.4	14.0	75.4
SW Miramichi	62	CPUE		1998	8	26	114.0	49.0	265.2	33.3		1.6		34.9	15.0	81.0
SW Miramichi	62	CPUE		1999	9	2	281.2	120.0	659.3	62.9		7.6		70.5	30.1	165.2
SW Miramichi	62	CPUE		2000	8	3	80.1	34.3	186.9	21.7		6.2		27.9	12.0	65.0
SW Miramichi	62	CPUE		2001	8	31	148.0	63.1	347.4	26.8		5.8		32.6	14.0	76.1
SW Miramichi	62	CPUE		2002	9	11	109.0	46.6	255.0	12.9		1.9		14.8	6.4	34.5
SW Miramichi	62	CPUE		2003	9	19	52.2	22.4	121.7	24.7		1.5		26.2	11.3	61.0
SW Miramichi	62	CPUE		2004	9	14	99.1	42.4	231.7	15.9		2.0		17.9	7.7	41.5
SW Miramichi	63	Zippin	5	1970	8	6	16.3	16.3	16.3	1.8	0.0	1.5	n.a.	3.3		
SW Miramichi	63	Zippin	5	1971	8	19	16.0	n.a.	n.a.	10.4	2.9	0.0	0.0	10.4		
SW Miramichi	63	Zippin	5	1972	8	10	10.9	10.6	11.1	2.6	0.0	0.0	n.a.	2.6		
SW Miramichi	63	Zippin	5	1973	8	21	38.8	36.6	41.1	0.6	0.0	0.0	0.0	0.6		
SW Miramichi	63	Zippin	5	1974	8	9	60.5	n.a.	n.a.	4.1	0.0	0.0	0.0	4.1		
SW Miramichi	63	Zippin	5	1975	8	11	60.4	57.3	63.4	19.2	0.8	1.7	-5.5	20.9		
SW Miramichi	63	Zippin	5	1977	8	30	13.6	8.4	18.9	1.2	n.a.	0.2	n.a.	1.4		
SW Miramichi	63	Zippin	5	1978	8	22	49.2	39.9	58.6	8.7	1.1	0.0	0.0	8.7		
SW Miramichi	63	Zippin	5	1982	9	30	32.5	30.6	34.5	1.5	0.0	0.7	0.0	2.2		
SW Miramichi	63	Zippin	5	1983	10	25	40.6	39.5	41.7	0.0	0.0	0.0	0.0	0.0		
SW Miramichi	63	Zippin	4	1984	9	14	43.3	38.5	48.1	1.5	0.0	0.9	n.a.	2.4		
SW Miramichi	63	CPUE		1993	9	9	193.5	82.9	451.8	15.8		0.0		15.8	6.8	36.6
SW Miramichi	63	CPUE		1994	8	18	109.2	47.0	253.9	68.1		0.0		68.1	29.1	159.6
SW Miramichi	63	CPUE		1997	9	17	107.8	46.4	250.7	31.9		2.6		34.5	14.8	80.2
SW Miramichi	64	Zippin	5	1970	8	7	10.9	8.2	13.7	1.3	-0.9	2.0	-1.0	3.3		
SW Miramichi	64	Zippin	5	1971	7	16	14.1	9.1	19.1	1.4	n.a.	0.0	0.0	1.4		
SW Miramichi	64	Zippin	4	1973	9	12	1.6	n.a.	n.a.	0.0	0.0	0.0	0.0	0.0		
SW Miramichi	64	Zippin	5	1974	8	1	8.8	n.a.	n.a.	0.0	0.0	0.5	n.a.	0.5		
SW Miramichi	64	Zippin	5	1975	7	25	6.3	n.a.	n.a.	0.5	n.a.	0.0	0.0	0.5		
SW Miramichi	64	Zippin	5	1976	8	3	15.2	n.a.	n.a.	2.4	-4.1	0.0	0.0	2.4		
SW Miramichi	64	Zippin	5	1977	9	8	14.3	-58.5	87.2	0.6	n.a.	0.0	0.0	0.6		
SW Miramichi	64	Zippin	5	1978	7	14	4.3	n.a.	n.a.	0.5	n.a.	0.5	0.0	1.0		
SW Miramichi	64	Zippin	5	1979	7	16	2.2	n.a.	n.a.	0.0	0.0	0.0	0.0	0.0		
SW Miramichi	64	Zippin	5	1980	8	28	3.3	n.a.	n.a.	0.0	0.0	0.0	0.0	0.0		
SW Miramichi	64	Zippin	4	1981	9	4	5.7	5.7	5.7	0.0	0.0	0.0	0.0	0.0		
SW Miramichi	64	Zippin	4	1982	7	19	0.5	n.a.	n.a.	0.5	n.a.	0.5	n.a.	1.0		
SW Miramichi	64	Zippin	5	1983	8	2	22.8	21.2	24.4	0.0	0.0	0.0	0.0	0.0		
SW Miramichi	64	Zippin	4	1984	8	9	6.2	5.8	6.5	0.0	0.0	0.6	n.a.	0.6		
SW Miramichi	64	Zippin	4	1985	9	3	13.5	7.4	19.5	0.0	0.0	0.0	0.0	0.0		
SW Miramichi	64	CPUE		1993	9	1	0.0	n.a.	n.a.	0.0		0.0		0.0	n.a.	n.a.
SW Miramichi	64	CPUE		1994	8	24	109.3	47.0	254.0	0.0		0.0		0.0	n.a.	n.a.
SW Miramichi	64	CPUE		1996	9	12	95.2	41.0	221.2	0.0		0.0		0.0	n.a.	n.a.
SW Miramichi	64	CPUE		1997	9	17	103.6	44.6	240.8	16.0		1.6		17.6	7.6	40.8
SW Miramichi	65	Zippin	5	1970	8	11	6.5	5.4	7.6	3.0	8.3	3.2	0.0	6.2		
SW Miramichi	65	Zippin	5	1971	7	19	8.1	4.6	11.7	1.5	0.0	0.0	0.0	1.5		
SW Miramichi	65	Zippin	5	1972	8	8	2.3	1.9	2.7	1.4	0.0	1.9	-0.9	3.3		
SW Miramichi	65	Zippin	5	1973	7	31	31.6	n.a.	n.a.	3.6	0.0	1.4	-0.5	5.0		
SW Miramichi	65	Zippin	5	1974	7	30	23.4	18.0	28.7	8.6	18.5	1.0	n.a.	9.6		
SW Miramichi	65	Zippin	5	1975	7	31	35.3	n.a.	n.a.	8.3	2.4	0.6	0.0	9.0		
SW Miramichi	65	Zippin	5	1976	7	29	52.8	23.2	82.5	7.6	n.a.	1.5	-0.7	9.1		
SW Miramichi	65	Zippin	5	1977	7	28	34.1	n.a.	n.a.	14.6	1.5	0.0	0.0	14.6		
SW Miramichi	65	Zippin	5	1978	8	3	35.6	-3.3	74.4	7.0	38.1	0.4	n.a.	7.5		
SW Miramichi	65	Zippin	5	1979	9	25	14.2	11.1	17.3	3.1	-31.7	1.1	0.0	4.3		
SW Miramichi	65	Zippin	5	1980	9	4	19.4	11.7	27.2	0.9	0.0	0.0	0.0	0.9		
SW Miramichi	65	Zippin	5	1981	9	2	44.0	41.5	46.4	4.1	1.9	1.3	-0.4	5.3		
SW Miramichi	65	Zippin	5	1982	7	20	7.0	3.8	10.2	2.7	-1.9	0.0	0.0	2.7		
SW Miramichi	65	Zippin	5	1983	9	7	7.9	6.8	9.0	0.3	n.a.	0.0	0.0	0.3		
SW Miramichi	65	Zippin	4	1984	8	23	7.8	6.8	8.8	3.7	1.9	0.3	0.0	4.0		
SW Miramichi	65	Zippin	4	1985	8	21	32.7	31.4	34.0	2.1	n.a.	0.0	0.0	2.1		
SW Miramichi	65	Zippin	4	1986	9	4	14.6	12.4	16.8	0.0	0.0	0.0	0.0	0.0		
SW Miramichi	65	CPUE		1993	9	7	37.4	16.1	86.9	0.0		0.0		0.0	n.a.	n.a.
SW Miramichi	65	CPUE		1998	8	25	119.3	51.3	277.4	9.0		1.6		10.6	4.6	24.6
SW Miramichi	65	CPUE		1999	8	23	60.5	26.1	140.3	10.7		2.3		13.1	5.6	30.3

Appendix 1 (cont'd). Atlantic salmon density estimates and 95% confidence intervals for 1970-2004.

			Removal				Density (fish per 100m²), variance, and/or upper and lower 95% CI									
River	Site	Estimator	Sweeps	Year	Month	Day	Age 0	lower	upper	Age 1	Var 1	Age 2+	Var 2+	Parr	lower	upper
SW Miramichi	65	CPUE		2000	8	1	84.6	36.2	197.5	15.7		0.9		16.6	7.1	38.6
SW Miramichi	65	CPUE		2001	8	29	98.4	42.1	230.1	10.7		0.0		10.7	4.6	25.0
SW Miramichi	65	CPUE		2002	9	12	232.6	98.5	549.0	13.4		2.7		16.1	6.9	37.5
SW Miramichi	65	CPUE		2003	9	25	111.5	47.6	260.9	24.2		0.0		24.2	10.4	56.4
SW Miramichi	65	CPUE		2004	9	16	66.9	28.7	155.9	3.2		3.2		6.4	2.7	14.9
SW Miramichi	66	Zippin	5	1970	8	18	24.5	20.8	28.3	1.4	-0.5	3.1	0.1	4.4		
SW Miramichi	66	Zippin	5	1971	7	21	9.1	6.8	11.5	4.1	0.0	1.7	0.0	5.8		
SW Miramichi	66	Zippin	5	1972	8	9	9.6	6.8	12.5	11.3	1.1	1.8	-0.9	13.1		
SW Miramichi	66	Zippin	5	1973	9	6	34.9	3.3	66.5	2.4	n.a.	0.3	n.a.	2.8		
SW Miramichi	66	Zippin	5	1974	8	27	59.9	56.5	63.4	16.5	0.9	0.0	0.0	16.5		
SW Miramichi	66	Zippin	5	1975	8	21	34.3	27.4	41.3	13.9	n.a.	3.5	-5.6	17.3		
SW Miramichi	66	Zippin	5	1977	8	30	58.3	53.2	63.4	12.7	0.9	0.0	-0.8	12.7		
SW Miramichi	66	Zippin	5	1978	8	23	38.0	33.0	43.0	5.6	2.0	0.7	0.0	6.4		
SW Miramichi	66	Zippin	5	1979	9	19	33.9	31.6	36.2	0.8	n.a.	0.4	n.a.	1.2		
SW Miramichi	66	Zippin	5	1980	8	27	31.5	26.2	36.8	0.0	0.0	0.6	0.0	0.6		
SW Miramichi	66	Zippin	5	1981	9	15	30.1	28.4	31.8	3.3	0.0	0.3	0.0	3.6		
SW Miramichi	66	Zippin	5	1982	9	27	8.1	7.2	9.1	1.2	0.0	0.6	n.a.	1.7		
SW Miramichi	66	Zippin	5	1983	9	8	33.6	31.6	35.7	1.2	n.a.	0.0	0.0	1.2		
SW Miramichi	66	Zippin	4	1984	8	7	12.1	9.2	15.1	3.3	-6.2	0.0	0.0	3.3		
SW Miramichi	67	Zippin	5	1970	8	19	3.6	2.6	4.6	0.3	0.0	0.0	0.0	0.3		
SW Miramichi	67	Zippin	5	1971	8	6	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0		
SW Miramichi	67	Zippin	4	1972	7	25	0.5	n.a.	n.a.	0.0	0.0	0.0	0.0	0.0		
SW Miramichi	67	Zippin	5	1973	7	18	1.1	n.a.	n.a.	0.0	0.0	0.0	0.0	0.0		
SW Miramichi	67	Zippin	4	1974	7	2	0.0	n.a.	n.a.	0.4	0.0	0.0	0.0	0.4		
SW Miramichi	67	Zippin	5	1975	8	6	10.5	n.a.	n.a.	0.0	0.0	0.0	0.0	0.0		
SW Miramichi	67	Zippin	5	1976	8	6	17.4	-2.1	36.9	0.0	0.0	0.0	0.0	0.0		
SW Miramichi	67	Zippin	5	1977	9	6	7.4	n.a.	n.a.	0.0	0.0	0.0	0.0	0.0		
SW Miramichi	67	Zippin	5	1978	7	18	8.4	6.6	10.2	0.5	n.a.	0.3	n.a.	0.8		
SW Miramichi	67	Zippin	4	1982	10	7	1.2	1.2	1.2	0.0	0.0	0.0	0.0	0.0		
SW Miramichi	67	Zippin	5	1983	10	20	3.5	3.1	3.9	0.0	0.0	0.0	0.0	0.0		
SW Miramichi	67	Zippin	3	1984	8	30	0.0	n.a.	n.a.	0.0	0.0	0.0	0.0	0.0		
SW Miramichi	67	CPUE		1993	9	1	48.9	21.1	113.3	5.9		0.0		5.9	2.5	13.8
SW Miramichi	68	Zippin	5	1970	8	20	23.4	22.3	24.5	0.3	n.a.	0.3	n.a.	0.5		
SW Miramichi	68	Zippin	5	1971	8	13	17.2	-13.4	47.8	0.0	0.0	0.0	0.0	0.0		
SW Miramichi	68	Zippin	4	1972	8	14	0.4	n.a.	n.a.	0.0	0.0	0.0	0.0	0.0		
SW Miramichi	68	Zippin	5	1973	8	16	26.2	n.a.	n.a.	0.2	0.0	0.2	n.a.	0.5		
SW Miramichi	68	Zippin	5	1974	7	23	37.3	n.a.	n.a.	0.0	0.0	0.0	0.0	0.0		
SW Miramichi	68	Zippin	5	1975	8	18	25.7	23.0	28.3	5.1	0.0	0.0	0.0	5.1		
SW Miramichi	68	CPUE		1993	8	31	130.4	56.0	303.6	5.6		0.0		5.6	2.4	13.1
SW Miramichi	69	Zippin	5	1970	8	25	9.1	1.8	16.5	0.7	n.a.	0.0	0.0	0.7		
SW Miramichi	69	Zippin	5	1971	8	18	2.3	2.2	2.3	0.0	0.0	0.0	0.0	0.0		
SW Miramichi	69	Zippin	4	1972	8	15	1.6	1.5	1.7	0.0	0.0	0.0	0.0	0.0		
SW Miramichi	69	Zippin	5	1973	7	31	5.3	-1.3	11.9	0.0	0.0	0.0	0.0	0.0		
SW Miramichi	69	Zippin	5	1974	7	30	3.0	n.a.	n.a.	0.0	0.0	0.0	0.0	0.0		
SW Miramichi	69	Zippin	4	1975	7	31	1.3	n.a.	n.a.	0.0	0.0	0.0	0.0	0.0		
SW Miramichi	69	Zippin	4	1976	7	29	0.4	n.a.	n.a.	0.0	0.0	0.0	0.0	0.0		
SW Miramichi	69	Zippin	4	1977	7	28	1.4	1.4	1.4	0.0	0.0	0.0	0.0	0.0		
SW Miramichi	69	Zippin	4	1978	8	3	0.4	n.a.	n.a.	0.0	0.0	0.0	0.0	0.0		
SW Miramichi	69	Zippin	5	1982	10	24	5.5	5.1	5.9	3.5	0.2	0.3	0.0	3.8		
SW Miramichi	69	Zippin	5	1983	11	2	78.3	75.1	81.6	8.2	0.3	7.5	0.1	15.8		
SW Miramichi	69	Zippin	4	1984	9	6	18.0	13.6	22.4	3.2	0.4	2.7	0.0	5.9		
SW Miramichi	69	CPUE		1993	9	7	27.8	12.0	64.5	4.8		0.0		4.8	2.0	11.3
SW Miramichi	69	CPUE		1994	8	29	37.5	16.1	86.9	38.6		8.7		47.4	20.3	110.4
SW Miramichi	69	CPUE		1997	9	17	28.4	12.2	66.0	54.5		4.7		59.2	25.3	138.3
SW Miramichi	69	CPUE		1998	8	25	63.7	27.5	147.9	8.8		1.5		10.3	4.4	24.0
SW Miramichi	69	CPUE		1999	8	23	111.0	47.7	258.0	35.5		8.3		43.8	18.8	102.0
SW Miramichi	69	CPUE		2000	8	1	3.7	1.6	8.7	15.3		5.4		20.8	8.9	48.3
SW Miramichi	69	CPUE		2001	8	29	52.5	22.6	122.4	40.4		7.3		47.7	20.4	111.7
SW Miramichi	69	CPUE		2002	9	18	105.0	44.9	245.6	41.2		10.6		51.8	22.1	121.6
SW Miramichi	69	CPUE		2003	9	25	39.3	16.9	91.5	68.3		4.0		72.3	30.6	170.8
SW Miramichi	69	CPUE		2004	9	16	106.5	45.5	249.1	38.5		17.9		56.4	24.0	132.5
SW Miramichi	70	Zippin	5	1970	8	27	73.8	n.a.	n.a.	6.5	1.2	12.1	9.3	18.6		
SW Miramichi	70	Zippin	5	1971	7	8	22.0	19.4	24.6	8.0	26.5	0.0	-18.9	8.0		
SW Miramichi	70	Zippin	4	1972	8	1	7.2	3.7	10.7	8.2	120.0	8.2	1172.5	16.5		
SW Miramichi	70	Zippin	5	1973	7	25	6.3	n.a.	n.a.	0.0	0.0	0.8	n.a.	0.8		
SW Miramichi	70	Zippin	5	1974	8	8	60.9	14.5	107.4	0.7	0.0	0.0	0.0	0.7		
SW Miramichi	70	Zippin	5	1975	8	5	62.0	n.a.	n.a.	1.5	0.0	0.0	0.0	1.5		

Appendix 1 (cont'd). Atlantic salmon density estimates and 95% confidence intervals for 1970-2004.

			Removal				Density (fish per 100m^2), variance, and/or upper and lower 95% CI									
River	Site	Estimator	Sweeps	Year	Month	Day	Age 0	lower	upper	Age 1	Var 1	Age 2+	Var 2+	Parr	lower	upper
SW Miramichi	70	Zippin	5	1976	7	27	39.7	n.a.	n.a.	3.5	0.0	0.3	0.0	3.8		
SW Miramichi	70	Zippin	5	1977	8	9	72.7	49.3	96.2	0.4	n.a.	0.0	0.0	0.4		
SW Miramichi	70	Zippin	5	1978	8	17	11.4	n.a.	n.a.	0.0	0.0	0.3	n.a.	0.3		
SW Miramichi	70	Zippin	5	1979	8	29	21.6	20.2	23.0	0.5	0.0	0.5	0.0	1.0		
SW Miramichi	70	Zippin	5	1980	8	8	34.4	32.6	36.1	0.2	n.a.	0.0	0.0	0.2		
SW Miramichi	70	Zippin	5	1981	7	22	43.8	36.2	51.4	0.3	n.a.	0.0	0.0	0.3		
SW Miramichi	70	Zippin	5	1982	7	13	7.1	4.3	9.9	0.0	0.0	0.7	0.0	0.7		
SW Miramichi	70	Zippin	4	1983	8	4	19.2	18.9	19.4	0.0	0.0	0.0	0.0	0.0		
SW Miramichi	70	Zippin	4	1984	8	8	53.1	44.3	61.8	1.4	-0.7	3.9	0.1	5.3		
SW Miramichi	70	Zippin	4	1985	8	13	182.6	175.2	190.0	1.5	0.0	0.0	0.0	1.5		
SW Miramichi	70	Zippin	4	1986	7	28	130.5	118.7	142.3	1.0	n.a.	0.0	0.0	1.0		
SW Miramichi	70	CPUE		1993	9	9	181.4	77.7	423.2	27.0		4.2		31.2	13.4	72.4
SW Miramichi	71	Zippin	5	1970	8	28	32.1	26.0	38.2	3.8	-2.2	2.5	-11.0	6.3		
SW Miramichi	71	Zippin	5	1971	7	28	41.1	n.a.	n.a.	2.7	n.a.	0.4	0.0	3.1		
SW Miramichi	71	Zippin	5	1973	9	5	19.6	n.a.	n.a.	0.0	0.0	0.0	0.0	0.0		
SW Miramichi	71	Zippin	5	1974	8	30	70.6	63.1	78.1	0.0	0.0	0.0	0.0	0.0		
SW Miramichi	71	Zippin	5	1975	7	25	51.9	30.6	73.3	2.5	-1.4	0.4	n.a.	2.9		
SW Miramichi	71	Zippin	5	1976	8	3	28.8	27.4	30.2	1.3	0.0	0.0	0.0	1.3		
SW Miramichi	71	Zippin	5	1977	8	11	40.3	34.2	46.3	0.0	0.0	0.0	0.0	0.0		
SW Miramichi	71	Zippin	5	1978	8	28	64.7	60.1	69.3	0.0	0.0	0.0	0.0	0.0		
SW Miramichi	71	Zippin	5	1979	8	31	16.0	11.7	20.2	0.0	0.0	0.0	0.0	0.0		
SW Miramichi	71	Zippin	5	1980	9	12	27.5	25.7	29.3	0.0	0.0	0.0	0.0	0.0		
SW Miramichi	71	Zippin	5	1981	8	13	42.8	41.2	44.3	0.0	0.0	0.0	0.0	0.0		
SW Miramichi	71	Zippin	5	1982	7	21	25.9	25.1	26.8	0.0	0.0	0.0	0.0	0.0		
SW Miramichi	71	Zippin	5	1983	8	5	23.1	21.8	24.3	0.0	0.0	0.0	0.0	0.0		
SW Miramichi	71	Zippin	4	1984	8	17	15.6	13.8	17.4	0.0	0.0	0.0	0.0	0.0		
SW Miramichi	71	CPUE		1993	9	1	59.8	25.8	138.7	0.0		0.0		0.0	n.a.	n.a.
SW Miramichi	71	CPUE		1994	8	24	134.9	58.0	314.1	0.0		0.0		0.0	n.a.	n.a.
SW Miramichi	71	CPUE		1997	9	10	108.4	46.6	252.0	0.0		0.0		0.0	n.a.	n.a.
SW Miramichi	72	Zippin	5	1970	7	6	0.0	n.a.	n.a.	1.6	n.a.	18.7	17.6	20.4		
SW Miramichi	72	Zippin	5	1971	8	27	11.2	11.1	11.4	13.2	0.0	2.1	0.0	15.3		
SW Miramichi	72	Zippin	4	1972	6	23	0.0	n.a.	n.a.	9.3	16.9	3.2	-2.7	12.5		
SW Miramichi	72	Zippin	5	1973	8	23	33.1	30.4	35.9	2.1	0.0	2.6	n.a.	4.7		
SW Miramichi	72	Zippin	5	1974	7	9	0.0	n.a.	n.a.	12.2	n.a.	0.0	25.3	12.2		
SW Miramichi	72	Zippin	5	1975	9	12	30.3	25.5	35.1	9.8	0.1	5.1	0.0	14.4		
SW Miramichi	72	Zippin	5	1976	8	19	0.0	n.a.	n.a.	9.0	0.0	8.1	0.9	17.1		
SW Miramichi	72	Zippin	5	1977	8	22	0.9	n.a.	n.a.	4.1	n.a.	7.3	0.3	11.4		
SW Miramichi	72	Zippin	5	1978	7	25	7.9	7.4	8.4	2.6	-2.0	7.5	0.0	10.1		
SW Miramichi	72	Zippin	4	1982	9	30	0.0	n.a.	n.a.	0.0	0.0	1.4	0.0	1.4		
SW Miramichi	72	Zippin	5	1983	10	28	0.0	n.a.	n.a.	0.0	0.0	1.7	n.a.	1.7		
SW Miramichi	72	Zippin	4	1984	7	17	0.0	n.a.	n.a.	0.0	0.0	0.0	0.0	0.0		
SW Miramichi	72	Zippin	4	1985	6	27	0.0	n.a.	n.a.	0.7	0.0	0.0	0.0	0.7		
SW Miramichi	72	CPUE		1993	9	8	34.9	15.0	80.9	11.1		2.0		13.1	5.6	30.5
SW Miramichi	73	Zippin	4	1970	7	17	0.0	n.a.	n.a.	0.0	0.0	0.0	0.0	0.0		
SW Miramichi	73	Zippin	4	1971	8	20	0.0	n.a.	n.a.	0.0	0.0	0.0	0.0	0.0		
SW Miramichi	73	Zippin	4	1972	6	22	0.0	n.a.	n.a.	0.0	0.0	0.0	0.0	0.0		
SW Miramichi	73	Zippin	4	1973	8	9	0.0	n.a.	n.a.	1.2	0.2	1.2	n.a.	2.3		
SW Miramichi	73	Zippin	4	1974	7	2	0.0	n.a.	n.a.	1.0	0.1	0.0	0.0	1.0		
SW Miramichi	73	Zippin	4	1975	9	12	0.0	n.a.	n.a.	0.0	0.0	0.0	0.0	0.0		
SW Miramichi	73	Zippin	4	1976	9	10	0.0	n.a.	n.a.	0.0	0.0	1.1	n.a.	1.1		
SW Miramichi	73	Zippin	5	1978	9	1	0.0	n.a.	n.a.	0.0	0.0	0.0	0.0	0.0		
SW Miramichi	73	Zippin	4	1982	9	29	0.0	n.a.	n.a.	0.0	0.0	0.0	0.0	0.0		
SW Miramichi	73	Zippin	5	1983	10	21	0.0	n.a.	n.a.	0.0	0.0	0.0	0.0	0.0		
SW Miramichi	73	Zippin	4	1984	9	4	0.0	n.a.	n.a.	0.8	n.a.	0.0	0.0	0.8		
SW Miramichi	73	CPUE		1993	9	8	14.9	6.4	34.8	9.5		0.0		9.5	4.1	22.1
SW Miramichi	79	Zippin	4	1970	8	6	23.6	20.8	26.5	6.1	2.5	8.5	n.a.	14.6		
SW Miramichi	79	Zippin	5	1971	7	21	19.2	16.2	22.3	8.8	0.3	6.1	3.7	14.9		
SW Miramichi	79	Zippin	5	1972	7	11	5.1	n.a.	n.a.	4.5	-61.1	0.4	n.a.	4.9		
SW Miramichi	79	Zippin	5	1973	7	3	18.9	17.5	20.2	2.5	0.3	0.7	0.0	3.3		
SW Miramichi	79	Zippin	5	1974	7	18	44.1	38.7	49.5	3.1	n.a.	0.0	n.a.	3.1		
SW Miramichi	79	Zippin	5	1975	7	17	34.4	33.1	35.8	8.4	131.9	3.0	n.a.	11.4		
SW Miramichi	79	Zippin	5	1976	7	8	78.9	77.9	81.7	6.7	0.0	1.8	-1.2	8.5		
SW Miramichi	79	Zippin	5	1977	7	20	26.6	23.3	29.9	5.1	0.3	3.0	n.a.	8.1		
SW Miramichi	79	Zippin	5	1978	7	17	23.5	22.0	25.0	0.0	0.0	10.7	5.5	10.7		
SW Miramichi	79	Zippin	5	1979	7	26	24.6	n.a.	n.a.	4.8	0.1	1.2	0.0	6.0		
SW Miramichi	79	Zippin	5	1980	6	26	89.0	82.6	95.3	2.8	0.4	1.2	0.0	4.0		
SW Miramichi	79	Zippin	5	1981	7	27	41.9	38.9	44.8	1.3	n.a.	3.1	0.0	4.4		

Appendix 1 (cont'd). Atlantic salmon density estimates and 95% confidence intervals for 1970-2004.

River	Site	Estimator	Removal Sweeps	Year	Month	Day	Density (fish per 100m^2), variance, and/or upper and lower 95% CI									
							Age 0	lower	upper	Age 1	Var 1	Age 2+	Var 2+	Parr	lower	upper
SW Miramichi	79	Zippin	5	1982	9	20	21.0	17.7	24.3	3.7	n.a.	0.4	0.0	4.1		
SW Miramichi	79	Zippin	5	1983	8	9	45.8	43.6	48.0	5.8	n.a.	1.4	-0.5	7.2		
SW Miramichi	79	Zippin	4	1984	7	22	5.7	5.7	5.7	1.3	0.0	0.3	n.a.	1.6		
SW Miramichi	79	Zippin	4	1986	8	18	51.2	43.0	59.5	8.2	0.3	2.3	0.0	10.5		
SW Miramichi	79	Zippin	4	1987	7	16	46.6	n.a.	n.a.	14.2	n.a.	2.0	-1.1	16.3		
SW Miramichi	79	Zippin	3	1988	7	5	83.4	75.9	91.0	4.4	0.0	0.0	n.a.	4.4		
SW Miramichi	79	Zippin	3	1989	7	4	82.8	77.0	88.7	23.4	13.1	2.1	n.a.	25.5		
SW Miramichi	79	Zippin	4	1990	7	12	90.3	n.a.	n.a.	18.3	2.3	1.6	0.0	19.9		
SW Miramichi	79	Zippin	4	1992	7	15	52.3	51.3	53.4	18.9	5.2	2.2	n.a.	21.0		
SW Miramichi	79	Zippin	3	1993	7	13	8.7	1.4	15.9	1.4		0.7		2.1	n.a.	n.a.
SW Miramichi	79	Zippin	3	1994	8	9	65.7	31.4	100.1	26.2		2.9		29.1	n.a.	n.a.
SW Miramichi	79	Zippin	3	1995	8	14	43.5	n.a.	n.a.	20.3		2.7		23.1	9.9	53.5
SW Miramichi	79	Zippin	3	1996	9	4	32.2	16.8	47.7	13.0		3.9		16.9	-17.5	51.3
SW Miramichi	79	CPUE		1997	8	27	106.3	45.7	247.0	40.3		3.4		43.7	18.8	101.7
SW Miramichi	79	CPUE		1998	8	26	95.6	41.1	222.1	18.6		4.4		23.0	9.9	53.4
SW Miramichi	79	CPUE		1999	8	31	143.6	61.6	334.5	49.0		4.3		53.3	22.9	124.5
SW Miramichi	79	CPUE		2000	8	17	158.1	67.3	371.5	23.2		2.2		25.3	10.9	59.0
SW Miramichi	79	Zippin	3	2001	8	15	98.2	89.9	106.5	37.7		2.5		40.2	33.3	47.1
SW Miramichi	79	Zippin	3	2002	9	19	49.6	42.3	57.0	23.3		3.0		26.3	20.6	31.9
SW Miramichi	79	Zippin	4	2003	9	18	105.8	101.9	109.6	28.3		4.8		33.1	25.4	40.7
SW Miramichi	80	Zippin	5	1970	7	22	0.0	n.a.	n.a.	0.0	0.0	5.7	8.4	5.7		
SW Miramichi	80	Zippin	4	1971	8	2	0.0	n.a.	n.a.	0.0	0.0	0.3	n.a.	0.3		
SW Miramichi	80	Zippin	4	1972	7	13	0.0	n.a.	n.a.	1.1	n.a.	0.0	0.0	1.1		
SW Miramichi	80	Zippin	4	1973	6	27	0.3	0.1	0.5	0.0	0.0	0.3	0.0	0.3		
SW Miramichi	80	Zippin	5	1974	7	8	0.0	n.a.	n.a.	0.5	0.0	0.0	0.0	0.5		
SW Miramichi	80	Zippin	5	1975	7	7	1.3	1.3	1.3	2.3	0.0	0.3	0.0	2.6		
SW Miramichi	80	Zippin	5	1976	6	29	0.0	n.a.	n.a.	1.0	0.0	0.5	n.a.	1.5		
SW Miramichi	80	Zippin	4	1977	7	11	0.0	n.a.	n.a.	0.0	0.0	0.0	0.0	0.0		
SW Miramichi	80	Zippin	4	1978	7	4	0.0	0.0	0.0	0.0	0.0	0.3	n.a.	0.3		
SW Miramichi	80	Zippin	4	1982	10	18	0.0	n.a.	n.a.	0.0	0.0	0.6	n.a.	0.6		
SW Miramichi	80	Zippin	5	1983	11	4	0.0	n.a.	n.a.	0.0	0.0	0.0	0.0	0.0		
SW Miramichi	80	Zippin	4	1984	9	7	0.0	n.a.	n.a.	0.0	0.0	0.0	0.0	0.0		
SW Miramichi	80	Zippin	4	1985	7	5	0.0	n.a.	n.a.	0.0	0.0	0.0	0.0	0.0		
SW Miramichi	80	CPUE		1993	8	31	0.0	n.a.	n.a.	0.0		0.0		0.0	n.a.	n.a.
SW Miramichi	81	Zippin	4	1970	7	21	0.0	n.a.	n.a.	0.0	0.0	0.0	0.0	0.0		
SW Miramichi	81	Zippin	4	1971	7	22	5.1	5.1	5.1	0.0	0.0	0.0	0.0	0.0		
SW Miramichi	81	Zippin	5	1972	7	6	0.0	n.a.	n.a.	1.0	0.0	1.3	n.a.	2.2		
SW Miramichi	81	Zippin	4	1973	6	26	0.0	n.a.	n.a.	0.0	0.0	1.7	n.a.	1.7		
SW Miramichi	81	Zippin	4	1974	6	26	0.0	n.a.	n.a.	0.8	0.0	0.0	n.a.	0.8		
SW Miramichi	81	Zippin	4	1975	7	8	0.0	n.a.	n.a.	1.8	-0.3	1.5	0.0	3.3		
SW Miramichi	81	Zippin	4	1976	6	25	0.0	n.a.	n.a.	0.0	0.0	2.5	0.0	2.5		
SW Miramichi	81	Zippin	5	1977	7	11	0.3	0.3	0.3	1.1	-1.2	1.1	n.a.	2.2		
SW Miramichi	81	Zippin	5	1978	7	4	5.6	3.4	7.8	1.0	0.0	5.1	0.0	6.1		
SW Miramichi	81	Zippin	5	1979	6	27	0.0	n.a.	n.a.	1.5	0.2	11.7	0.0	13.2		
SW Miramichi	81	Zippin	4	1980	7	1	0.0	n.a.	n.a.	0.0	0.0	0.0	0.0	0.0		
SW Miramichi	81	Zippin	4	1981	7	6	0.0	n.a.	n.a.	0.0	0.0	0.9	0.0	0.9		
SW Miramichi	81	Zippin	4	1982	7	6	0.0	n.a.	n.a.	0.0	0.0	0.4	n.a.	0.4		
SW Miramichi	81	Zippin	4	1983	7	4	0.0	n.a.	n.a.	0.0	0.0	0.0	0.0	0.0		
SW Miramichi	81	Zippin	4	1984	6	26	0.0	n.a.	n.a.	0.0	0.0	0.0	0.0	0.0		
SW Miramichi	81	Zippin	4	1985	7	4	0.0	n.a.	n.a.	0.0	0.0	0.0	0.0	0.0		
SW Miramichi	81	Zippin	4	1986	7	14	0.0	n.a.	n.a.	0.0	0.0	0.0	0.0	0.0		
SW Miramichi	81	CPUE		1993	8	31	0.0	n.a.	n.a.	12.6		3.6		16.2	7.0	37.7
SW Miramichi	82	Zippin	5	1970	8	5	67.3	n.a.	n.a.	2.6	0.0	12.1	0.0	14.8		
SW Miramichi	82	Zippin	5	1971	7	23	38.5	26.4	50.6	5.9	1.6	1.6	0.0	7.5		
SW Miramichi	82	Zippin	5	1972	9	5	17.4	16.6	18.3	9.9	0.0	1.3	n.a.	11.2		
SW Miramichi	82	Zippin	5	1973	7	25	121.8	n.a.	n.a.	3.1	0.0	3.5	1.2	6.7		
SW Miramichi	82	Zippin	5	1974	6	25	26.7	n.a.	n.a.	16.7	-2.3	0.0	0.6	16.7		
SW Miramichi	82	Zippin	5	1975	6	30	15.6	-4.6	35.7	24.4	3.5	1.5	0.0	25.9		
SW Miramichi	82	Zippin	5	1976	6	29	13.3	12.2	14.5	23.7	n.a.	4.1	n.a.	27.8		
SW Miramichi	82	Zippin	5	1977	7	14	54.1	50.5	57.6	14.3	0.5	1.7	0.0	16.0		
SW Miramichi	82	Zippin	5	1978	7	5	19.8	17.7	21.9	25.7	2.1	10.4	1.0	36.1		
SW Miramichi	82	Zippin	5	1979	6	28	14.1	n.a.	n.a.	17.9	0.7	4.4	0.0	22.2		
SW Miramichi	82	Zippin	5	1980	7	4	200.8	191.0	210.7	20.7	n.a.	3.9	0.4	24.7		
SW Miramichi	82	Zippin	5	1981	7	7	122.6	n.a.	n.a.	14.5	15.7	5.9	1.8	20.4		
SW Miramichi	82	Zippin	5	1982	7	7	38.6	n.a.	n.a.	5.8	0.3	3.4	0.3	9.3		
SW Miramichi	82	Zippin	5	1983	8	15	96.6	93.6	99.5	7.1	0.0	4.0	3.3	11.1		
SW Miramichi	82	Zippin	4	1984	7	17	24.2	22.8	25.5	5.1	0.1	1.5	-3.6	6.6		

Appendix 1 (cont'd). Atlantic salmon density estimates and 95% confidence intervals for 1970-2004.

River	Site	Estimator	Removal Sweeps	Year	Month	Day	Density (fish per $100m^2$), variance, and/or upper and lower 95% CI									
							Age 0	lower	upper	Age 1	Var 1	Age 2+	Var 2+	Parr	lower	upper
SW Miramichi	82	Zippin	4	1985	7	24	93.0	90.2	95.8	15.4	6.8	0.7	0.0	16.0		
SW Miramichi	82	Zippin	4	1986	7	24	104.9	n.a.	n.a.	17.5	0.4	0.0	0.0	17.5		
SW Miramichi	82	Zippin	4	1987	7	8	338.8	n.a.	n.a.	28.5	222.2	5.5	-26.0	34.0		
SW Miramichi	82	Zippin	4	1988	7	20	366.7	n.a.	n.a.	30.5	1.2	4.5	0.0	35.1		
SW Miramichi	82	Zippin	4	1989	7	12	157.7	n.a.	n.a.	21.8	1.2	3.2	0.0	25.0		
SW Miramichi	82	Zippin	4	1990	7	19	319.5	n.a.	n.a.	33.1	6.9	8.1	-44.1	41.2		
SW Miramichi	82	Zippin	4	1991	8	4	63.3	58.2	68.4	23.7	20.7	4.7	n.a.	28.4		
SW Miramichi	82	Zippin	3	1992	7	8	171.2	166.6	175.9	19.5	1.5	0.9	0.0	20.4		
SW Miramichi	82	Zippin	4	1993	8	5	115.9	56.1	175.7	17.8		1.5		19.3	13.9	24.7
SW Miramichi	82	Zippin	3	1994	7	14	253.8	229.4	278.3	21.2		2.4		23.7	n.a.	n.a.
SW Miramichi	82	Zippin	3	1995	8	15	241.6	214.9	268.3	20.5		2.9		23.4	10.1	54.4
SW Miramichi	82	CPUE		1996	9	13	198.7	85.1	464.2	22.8		3.8		26.6	11.5	61.8
SW Miramichi	82	Zippin	3	1997	9	17	153.0	117.8	188.2	99.2		16.8		116.0	82.1	149.9
SW Miramichi	82	Zippin	3	1998	9	1	191.4	162.5	220.3	30.9		5.8		36.6	20.9	52.4
SW Miramichi	82	Zippin	3	1999	8	19	273.4	227.1	319.7	43.4		7.0		50.3	18.1	82.5
SW Miramichi	82	Zippin	3	2000	8	11	162.4	153.3	171.6	14.3		1.1		15.5	n.a.	n.a.
SW Miramichi	82	Zippin	3	2001	8	14	158.5	146.7	170.3	45.4		10.4		55.8	54.3	57.3
SW Miramichi	82	Zippin	3	2002	9	10	211.9	209.0	214.8	9.8		3.3		13.1	n.a.	n.a.
SW Miramichi	82	Zippin	3	2003	9	10	129.6	127.1	132.1	31.1		5.1		36.2	33.8	38.7
SW Miramichi	82	Zippin	3	2004	9	14	102.1	99.4	104.8	11.3		2.5		13.8	13.8	13.8
SW Miramichi	83	Zippin	4	1970	8	4	0.0	n.a.	n.a.	0.0	0.0	0.4	n.a.	0.4		
SW Miramichi	83	Zippin	5	1971	7	26	14.2	8.7	19.7	0.0	0.0	0.0	0.0	0.0		
SW Miramichi	83	Zippin	5	1972	8	31	0.0	n.a.	n.a.	1.1	n.a.	4.0	0.0	5.2		
SW Miramichi	83	Zippin	4	1973	8	6	0.0	n.a.	n.a.	0.9	0.0	0.0	0.0	0.9		
SW Miramichi	83	Zippin	5	1974	7	23	0.8	0.8	0.8	5.5	0.0	0.5	n.a.	5.9		
SW Miramichi	83	Zippin	5	1975	7	3	7.7	n.a.	n.a.	5.8	0.5	3.7	-0.8	9.6		
SW Miramichi	83	Zippin	5	1976	6	24	4.0	n.a.	n.a.	5.1	2.8	6.7	0.0	11.8		
SW Miramichi	83	Zippin	5	1977	7	14	10.0	5.6	14.3	1.4	0.0	2.3	0.1	3.7		
SW Miramichi	83	Zippin	5	1978	7	5	15.4	12.7	18.2	10.4	0.1	2.2	0.1	12.6		
SW Miramichi	83	Zippin	5	1979	7	5	0.0	n.a.	n.a.	9.7	0.0	2.6	0.0	12.3		
SW Miramichi	83	Zippin	5	1980	6	30	0.5	n.a.	n.a.	1.8	0.0	8.1	0.0	9.9		
SW Miramichi	83	Zippin	4	1981	7	2	0.0	n.a.	n.a.	0.9	n.a.	0.9	0.0	1.7		
SW Miramichi	83	Zippin	4	1982	7	8	0.0	n.a.	n.a.	0.8	n.a.	0.0	0.0	0.8		
SW Miramichi	83	Zippin	4	1983	9	2	0.0	n.a.	n.a.	0.0	0.0	0.0	0.0	0.0		
SW Miramichi	83	Zippin	4	1984	7	3	0.0	n.a.	n.a.	0.0	0.0	0.0	0.0	0.0		
SW Miramichi	83	Zippin	4	1985	7	23	0.0	n.a.	n.a.	3.6	0.0	0.0	0.0	3.6		
SW Miramichi	83	Zippin	4	1986	7	16	0.0	n.a.	n.a.	0.0	0.0	0.0	0.0	0.0		
SW Miramichi	83	CPUE		1993	9	8	0.0	n.a.	n.a.	3.0		2.4		5.4	2.3	12.7
SW Miramichi	84	Zippin	5	1971	8	24	31.9	31.9	31.9	7.8	0.0	5.0	0.0	12.8		
SW Miramichi	84	Zippin	5	1972	8	17	7.3	5.3	9.3	7.3	0.0	5.4	0.1	12.7		
SW Miramichi	84	Zippin	4	1973	9	4	9.9	1.9	17.9	0.9	0.0	0.9	n.a.	1.9		
SW Miramichi	84	Zippin	4	1974	8	16	102.8	100.5	105.1	16.9	6.6	8.4	0.0	25.3		
SW Miramichi	84	Zippin	5	1975	8	5	114.4	110.8	118.1	38.5	2.9	7.9	0.0	46.4		
SW Miramichi	84	Zippin	5	1976	9	8	48.7	46.0	51.3	30.8	n.a.	21.3	6.3	52.0		
SW Miramichi	84	Zippin	5	1977	7	27	154.6	151.4	157.9	13.6	0.1	17.9	0.6	31.5		
SW Miramichi	84	Zippin	5	1978	7	17	156.6	n.a.	n.a.	37.1	1.9	6.4	6.9	43.5		
SW Miramichi	84	Zippin	5	1979	9	6	56.5	51.4	61.6	32.1	2.9	14.1	0.9	46.3		
SW Miramichi	84	Zippin	5	1980	8	11	62.0	59.9	64.0	28.3	0.1	6.1	0.0	34.4		
SW Miramichi	84	Zippin	5	1981	8	26	132.9	n.a.	n.a.	22.9	1.0	7.9	0.5	30.9		
SW Miramichi	84	Zippin	5	1982	9	20	29.7	28.1	31.4	29.3	4.5	9.5	0.1	38.7		
SW Miramichi	84	Zippin	5	1983	8	24	62.0	59.7	64.2	18.0	0.2	10.7	0.5	28.8		
SW Miramichi	84	Zippin	4	1984	8	15	25.4	21.7	29.1	5.5	n.a.	2.6	0.4	8.2		
SW Miramichi	84	Zippin	4	1985	7	31	151.8	147.7	156.0	21.2	1.2	1.6	1.0	22.7		
SW Miramichi	84	Zippin	4	1986	7	9	110.3	n.a.	n.a.	52.1	2.7	6.8	10.6	58.9		
SW Miramichi	84	Zippin	4	1987	7	9	79.2	n.a.	n.a.	22.6	6.2	1.6	n.a.	24.2		
SW Miramichi	84	Zippin	4	1988	7	12	62.0	57.8	66.3	22.7	27.3	0.6	n.a.	23.2		
SW Miramichi	84	Zippin	4	1989	7	18	72.9	68.2	77.6	44.5	4.8	7.2	0.0	51.8		
SW Miramichi	84	Zippin	4	1990	7	4	34.2	30.4	37.9	13.5	2.8	1.6	n.a.	15.1		
SW Miramichi	84	Zippin	4	1992	7	7	92.8	83.4	102.1	73.4	7.9	22.3	n.a.	95.7		
SW Miramichi	84	Zippin	4	1993	7	20	48.2	45.5	50.9	43.0		9.5		52.4	46.1	58.8
SW Miramichi	84	Zippin	3	1994	7	28	113.2	60.6	165.8	46.5		9.5		56.0	-2.2	114.3
SW Miramichi	84	Zippin	3	1995	8	16	278.1	263.7	292.4	61.9		15.5		77.3	72.2	82.5
SW Miramichi	84	CPUE		1996	9	13	204.8	87.7	478.4	51.0		2.4		53.3	22.9	124.5
SW Miramichi	84	Zippin	3	1997	9	24	59.8	57.2	62.4	91.1		4.5		95.6	89.2	101.9
SW Miramichi	84	Zippin	3	1998	9	2	110.3	94.9	125.7	54.7		25.4		80.1	58.4	101.9
SW Miramichi	84	Zippin	3	1999	8	23	202.6	143.9	261.3	61.8		20.7		82.5	73.7	91.2
SW Miramichi	84	Zippin	3	2000	8	14	97.8	92.1	103.4	16.6		7.4		24.1	22.3	25.8

Appendix 1 (cont'd). Atlantic salmon density estimates and 95% confidence intervals for 1970-2004.

River	Site	Estimator	Removal Sweeps	Year	Month	Day	Density (fish per 100m^3), variance, and/or upper and lower 95% CI									
							Age 0	lower	upper	Age 1	Var 1	Age 2+	Var 2+	Parr	lower	upper
SW Miramichi	84	Zippin	3	2001	8	16	132.0	125.1	138.9	64.1		24.9		89.0	80.1	97.9
SW Miramichi	84	Zippin	3	2002	9	26	196.7	193.2	200.1	49.8		11.0		60.8	57.8	63.8
SW Miramichi	84	Zippin	3	2003	9	12	47.1	39.3	55.0	50.2		12.5		62.7	57.5	67.8
SW Miramichi	84	Zippin	3	2004	9	23	38.4	37.7	39.0	28.3		19.3		47.6	45.3	50.0
SW Miramichi	85	Zippin	5	1971	8	24	23.6	21.7	25.4	12.1	0.0	7.5	0.2	19.6		
SW Miramichi	85	Zippin	5	1972	8	29	0.0	n.a.	n.a.	10.7	0.0	6.2	0.1	16.9		
SW Miramichi	85	Zippin	5	1973	8	29	9.4	7.8	11.0	2.2	0.0	0.7	0.0	2.9		
SW Miramichi	85	Zippin	5	1974	7	25	3.5	n.a.	n.a.	28.8	1.4	3.5	-15.0	32.3		
SW Miramichi	85	Zippin	5	1975	7	23	7.8	3.3	12.2	31.4	0.5	8.0	0.1	39.4		
SW Miramichi	85	Zippin	5	1977	9	13	43.8	n.a.	n.a.	30.1	1.9	2.9	0.0	33.0		
SW Miramichi	85	Zippin	5	1978	8	16	85.0	77.8	92.1	24.0	0.7	1.7	0.0	25.7		
SW Miramichi	85	Zippin	5	1979	8	28	51.2	47.3	55.2	27.9	1.0	2.0	0.0	29.9		
SW Miramichi	85	Zippin	5	1980	8	12	26.5	22.5	30.5	15.7	2.0	3.9	n.a.	19.7		
SW Miramichi	85	Zippin	5	1981	9	16	95.9	91.6	100.1	24.0	2.4	8.6	0.1	32.6		
SW Miramichi	85	Zippin	5	1982	8	17	76.4	n.a.	n.a.	25.3	0.2	3.9	142.4	29.2		
SW Miramichi	85	Zippin	5	1983	8	29	2.4	2.4	2.4	25.6	0.8	10.3	0.9	35.9		
SW Miramichi	85	Zippin	4	1984	8	14	0.0	n.a.	n.a.	1.5	0.0	8.0	2.6	9.5		
SW Miramichi	85	CPUE		1993	9	9	88.3	38.0	205.1	43.2		5.4		48.7	20.9	113.5
SW Miramichi	89	Zippin	5	1970	7	9	12.2	9.5	15.0	2.7	-7.3	15.5	168.7	18.3		
SW Miramichi	89	Zippin	5	1971	8	5	29.5	27.8	31.2	6.8	0.4	7.2	0.0	14.0		
SW Miramichi	89	Zippin	5	1972	8	28	2.8	2.5	3.1	11.0	0.0	1.1	n.a.	12.1		
SW Miramichi	89	Zippin	5	1973	7	19	15.6	12.8	18.4	1.5	0.0	2.8	n.a.	4.3		
SW Miramichi	89	Zippin	5	1974	7	22	32.3	n.a.	n.a.	7.5	0.7	4.0	0.4	11.6		
SW Miramichi	89	Zippin	5	1975	7	16	13.0	5.2	20.9	29.5	0.4	9.8	1.8	39.3		
SW Miramichi	89	Zippin	5	1976	7	22	38.7	37.5	39.9	8.4	0.1	11.6	0.0	20.0		
SW Miramichi	89	Zippin	5	1977	7	19	86.8	n.a.	n.a.	20.8	1.0	1.8	n.a.	22.6		
SW Miramichi	89	Zippin	5	1978	9	6	56.2	53.6	58.8	9.9	0.0	1.8	0.0	11.8		
SW Miramichi	89	Zippin	5	1982	10	19	13.7	12.3	15.2	7.5	0.3	6.6	0.2	14.1		
SW Miramichi	89	Zippin	5	1983	10	31	24.7	22.8	26.7	1.8	0.0	0.3	n.a.	2.1		
SW Miramichi	89	Zippin	4	1984	8	21	20.2	n.a.	n.a.	8.2	0.4	3.1	0.0	11.3		
SW Miramichi	89	Zippin	4	1985	9	4	43.8	27.2	60.3	8.4	3.5	4.2	n.a.	12.7		
SW Miramichi	89	Zippin	4	1986	8	27	44.8	37.8	51.9	23.9	1.3	1.3	-0.6	25.2		
SW Miramichi	89	CPUE		1993	9	2	65.8	28.4	152.7	15.7		3.4		19.2	8.3	44.5
SW Miramichi	90	Zippin	5	1970	7	10	3.9	3.9	3.9	2.4	0.0	19.9	1.3	22.3		
SW Miramichi	90	Zippin	5	1971	7	28	82.4	80.0	84.7	8.7	0.0	3.9	0.0	12.6		
SW Miramichi	90	Zippin	4	1972	8	22	0.0	n.a.	n.a.	19.5	0.0	1.6	0.0	21.1		
SW Miramichi	90	Zippin	5	1973	7	10	63.7	54.1	73.4	3.3	-22.0	5.7	0.4	8.9		
SW Miramichi	90	Zippin	4	1974	7	9	1.4	n.a.	n.a.	29.1	0.0	0.6	n.a.	29.7		
SW Miramichi	90	Zippin	5	1975	7	9	0.0	n.a.	n.a.	10.0	1.5	13.9	0.0	23.9		
SW Miramichi	90	Zippin	5	1976	6	28	1.9	n.a.	n.a.	22.2	0.3	16.5	0.0	38.7		
SW Miramichi	90	Zippin	5	1977	7	18	110.6	89.9	131.4	27.5	66.2	12.0	14.8	39.5		
SW Miramichi	90	Zippin	5	1978	9	6	90.5	78.7	102.4	21.6	4.4	3.2	0.2	24.8		
SW Miramichi	90	Zippin	5	1982	10	5	4.6	4.2	5.0	7.3	0.0	1.0	0.0	8.3		
SW Miramichi	90	Zippin	5	1983	10	27	0.4	0.4	0.4	9.2	0.0	2.3	0.0	11.5		
SW Miramichi	90	Zippin	4	1984	8	23	0.0	n.a.	n.a.	2.8	0.0	1.6	0.0	4.4		
SW Miramichi	90	CPUE		1993	9	2	27.7	12.0	64.4	19.2		10.3		29.5	12.7	68.5
SW Miramichi	91	Zippin	5	1970	7	24	4.1	3.9	4.3	11.9	1.7	16.8	3.6	28.7		
SW Miramichi	91	Zippin	5	1971	7	29	17.5	13.5	21.5	55.1	1.6	13.4	2.0	68.5		
SW Miramichi	91	Zippin	5	1972	8	9	24.8	n.a.	n.a.	28.9	6.9	17.0	1.1	45.9		
SW Miramichi	91	Zippin	5	1973	8	8	3.6	3.4	3.8	6.7	6.4	2.6	-1.4	9.4		
SW Miramichi	91	Zippin	5	1974	8	14	46.6	n.a.	n.a.	43.1	n.a.	10.5	n.a.	53.6		
SW Miramichi	91	Zippin	5	1975	9	2	54.4	n.a.	n.a.	74.1	9.5	35.3	2.9	109.4		
SW Miramichi	91	Zippin	5	1977	8	10	50.4	42.8	58.1	75.2	4.3	14.4	16.7	89.6		
SW Miramichi	91	Zippin	5	1978	8	10	6.9	4.5	9.3	21.6	3.4	5.8	0.3	27.5		
SW Miramichi	91	Zippin	5	1979	8	2	11.7	9.2	14.2	12.7	1.6	12.7	0.6	25.4		
SW Miramichi	91	Zippin	5	1980	8	22	8.1	5.8	10.4	18.8	0.6	1.6	0.0	20.4		
SW Miramichi	91	Zippin	5	1981	8	5	27.7	22.3	33.1	11.0	81.5	5.2	0.0	16.2		
SW Miramichi	91	Zippin	5	1982	8	5	20.1	18.2	21.9	46.7	0.9	15.6	0.2	62.2		
SW Miramichi	91	Zippin	5	1983	8	10	51.3	46.4	56.1	35.7	0.6	9.1	6.7	44.8		
SW Miramichi	91	Zippin	4	1984	8	15	37.0	32.0	42.0	17.2	1.4	6.1	11.5	23.4		
SW Miramichi	91	Zippin	4	1985	8	15	27.5	24.2	30.8	24.8	0.4	7.3	3.6	32.0		
SW Miramichi	91	Zippin	4	1986	8	14	19.0	14.1	23.9	50.2	5.5	10.1	3.0	60.3		
SW Miramichi	91	CPUE		2000	10	11	86.3	36.9	201.5	44.2		7.1		51.3	21.9	120.4
SW Miramichi	92	Zippin	5	1970	7	23	153.9	145.1	162.6	9.8	2.0	2.4	n.a.	12.2		
SW Miramichi	92	Zippin	4	1971	8	23	52.3	38.1	66.6	43.9	1.9	2.9	0.0	46.8		
SW Miramichi	92	Zippin	5	1972	8	8	54.5	52.5	56.6	17.1	0.2	8.9	0.3	26.0		
SW Miramichi	92	Zippin	5	1973	8	1	61.9	58.3	65.6	26.3	10.6	3.9	n.a.	30.2		

Appendix 1 (cont'd). Atlantic salmon density estimates and 95% confidence intervals for 1970-2004.

			Removal				Density (fish per 100m²), variance, and/or upper and lower 95% CI									
River	Site	Estimator	Sweeps	Year	Month	Day	Age 0	lower	upper	Age 1	Var 1	Age 2+	Var 2+	Parr	lower	upper
SW Miramichi	92	Zippin	5	1974	8	14	99.8	86.4	113.1	51.4	n.a.	2.1	0.0	53.5		
SW Miramichi	92	Zippin	5	1975	7	23	28.8	n.a.	n.a.	32.6	n.a.	6.4	n.a.	39.1		
SW Miramichi	92	Zippin	5	1976	7	20	59.3	54.8	63.9	27.2	3.4	6.0	13.4	33.2		
SW Miramichi	92	Zippin	5	1977	8	10	98.2	n.a.	n.a.	48.7	1.3	17.2	0.7	65.9		
SW Miramichi	92	Zippin	5	1978	8	10	50.0	47.0	53.1	40.7	0.8	6.1	5.5	46.8		
SW Miramichi	92	Zippin	5	1979	8	2	57.6	52.7	62.5	21.4	1.8	2.3	0.0	23.7		
SW Miramichi	92	Zippin	5	1980	8	21	60.6	58.1	63.0	37.3	8.8	5.3	-13.1	42.7		
SW Miramichi	92	Zippin	5	1981	8	6	141.1	131.8	150.4	32.6	3.5	4.0	0.0	36.6		
SW Miramichi	92	Zippin	5	1982	8	5	25.3	23.2	27.4	47.3	1.6	12.1	0.1	59.4		
SW Miramichi	92	Zippin	5	1983	8	10	91.8	88.1	95.5	14.1	1.6	10.3	.	24.4		
SW Miramichi	92	Zippin	4	1984	8	15	72.0	70.6	73.4	12.0	0.1	9.0	0.2	21.1		
SW Miramichi	92	Zippin	4	1985	8	16	84.5	79.1	89.9	32.6	2.6	0.0	0.0	32.6		
SW Miramichi	92	Zippin	4	1986	8	14	150.0	135.3	164.8	23.5	1.5	7.1	-102.2	30.7		
SW Miramichi	92	Zippin	4	1987	7	21	146.0	138.2	153.8	47.1	6.6	3.2	0.0	50.4		
SW Miramichi	92	Zippin	4	1988	7	13	106.8	104.7	108.8	40.4	7.5	1.5	0.0	41.9		
SW Miramichi	92	Zippin	4	1989	7	13	89.4	85.5	93.2	54.0	6.1	9.6	1.6	63.6		
SW Miramichi	92	Zippin	4	1990	7	17	145.4	140.2	150.6	33.3	1.2	8.5	12.1	41.8		
SW Miramichi	92	Zippin	4	1992	7	21	71.5	64.8	78.2	80.2	163.9	12.6	-896.4	92.8		
SW Miramichi	92	Zippin	4	1993	7	29	173.2	170.8	175.5	45.4		13.0		58.4	54.6	62.2
SW Miramichi	92	Zippin	3	1994	8	30	127.2	122.2	132.3	40.5		4.4		44.9	44.0	45.7
SW Miramichi	92	CPUE		1995	8	17	229.9	98.3	537.8	72.9		5.6		78.6	33.5	184.5
SW Miramichi	92	CPUE		1996	9	11	114.4	49.2	266.0	32.9		7.8		40.7	17.5	94.8
SW Miramichi	92	CPUE		1997	9	23	93.0	40.0	216.1	39.9		2.4		42.3	18.2	98.5
SW Miramichi	92	CPUE		1998	8	27	124.9	53.7	290.5	28.7		3.6		32.4	13.9	75.2
SW Miramichi	92	CPUE		1999	9	7	154.0	66.1	358.9	53.9		2.7		56.6	24.2	132.2
SW Miramichi	92	CPUE		2000	8	9	92.5	39.6	216.0	60.5		5.6		66.1	28.0	155.7
SW Miramichi	92	Zippin	3	2001	8	23	59.4	54.3	64.5	45.4		7.2		52.6	45.7	59.5
SW Miramichi	92	CPUE		2002	9	11	114.7	49.0	268.4	48.1		3.1		51.2	21.8	120.0
SW Miramichi	92	CPUE		2003	9	11	54.6	23.4	127.2	40.4		3.4		43.8	18.7	102.5
SW Miramichi	92	CPUE		2004	9	15	156.4	66.6	367.3	33.4		7.3		40.6	17.4	95.0
SW Miramichi	93	Zippin	4	1970	7	14	2.3	1.3	3.2	1.5	-6.5	2.1	n.a.	3.6		
SW Miramichi	93	Zippin	4	1971	8	4	0.0	n.a.	n.a.	0.0	0.0	0.0	0.0	0.0		
SW Miramichi	94	Zippin	5	1971	8	26	39.7	37.7	41.7	32.0	0.2	2.0	0.0	34.0		
SW Miramichi	94	Zippin	5	1972	8	7	61.9	n.a.	n.a.	6.9	1.7	1.8	n.a.	8.7		
SW Miramichi	94	Zippin	5	1973	7	31	78.1	59.4	96.9	3.7	n.a.	0.0	0.0	3.7		
SW Miramichi	94	Zippin	5	1974	8	10	30.6	25.0	36.3	9.5	77.0	1.5	n.a.	10.9		
SW Miramichi	94	Zippin	5	1975	8	21	51.2	n.a.	n.a.	30.3	0.8	7.1	6085.8	37.4		
SW Miramichi	94	Zippin	5	1976	6	26	49.8	n.a.	n.a.	11.8	n.a.	3.3	-2.3	15.1		
SW Miramichi	94	Zippin	5	1977	8	10	67.2	n.a.	n.a.	26.8	n.a.	7.4	0.9	34.1		
SW Miramichi	94	Zippin	5	1978	8	10	11.2	-2.6	25.1	4.7	-5.5	1.3	0.0	6.1		
SW Miramichi	94	Zippin	5	1979	8	2	3.6	3.6	3.6	1.5	-1.1	0.8	0.0	2.3		
SW Miramichi	94	Zippin	5	1980	8	21	13.0	10.2	15.9	0.0	0.0	0.7	n.a.	0.7		
SW Miramichi	94	Zippin	5	1981	8	5	7.1	6.8	7.4	2.1	0.0	0.0	0.0	2.1		
SW Miramichi	94	Zippin	5	1982	8	5	13.9	10.8	17.0	9.7	0.7	3.0	-4.7	12.7		
SW Miramichi	94	Zippin	5	1983	8	10	27.6	21.9	33.3	1.3	0.0	0.0	0.0	1.3		
SW Miramichi	94	Zippin	4	1984	8	15	33.5	31.9	35.2	3.1	0.0	0.0	0.0	3.1		
SW Miramichi	94	Zippin	4	1985	8	15	70.9	64.3	77.5	11.3	-143.4	3.8	-2.3	15.1		
SW Miramichi	94	Zippin	4	1986	8	14	85.1	75.7	94.4	3.5	-3.2	2.6	0.0	6.1		
SW Miramichi	95	Zippin	5	1970	7	8	6.5	n.a.	n.a.	4.1	n.a.	9.1	0.2	13.2		
SW Miramichi	95	Zippin	5	1971	7	12	11.2	6.1	16.4	9.4	0.5	1.2	0.0	10.6		
SW Miramichi	95	Zippin	5	1972	7	18	0.7	0.6	0.7	1.7	0.0	0.7	-0.3	2.4		
SW Miramichi	95	Zippin	5	1973	7	24	8.9	7.3	10.6	0.8	n.a.	0.0	0.0	0.8		
SW Miramichi	95	Zippin	5	1974	7	30	13.0	n.a.	n.a.	28.7	26.7	2.6	0.0	31.3		
SW Miramichi	95	Zippin	5	1975	7	30	62.8	56.2	69.4	21.7	n.a.	9.4	0.0	31.2		
SW Miramichi	95	Zippin	5	1976	7	29	22.6	19.8	25.4	8.6	2.4	4.3	-7.1	12.9		
SW Miramichi	95	Zippin	5	1977	7	28	56.7	49.1	64.4	11.5	3.6	4.4	-5.8	15.9		
SW Miramichi	95	Zippin	5	1978	8	3	80.1	77.6	82.6	26.8	1.1	0.8	0.0	27.6		
SW Miramichi	95	Zippin	5	1982	10	14	4.0	n.a.	n.a.	49.7	2.1	2.0	0.0	51.7		
SW Miramichi	95	Zippin	5	1983	11	1	71.8	69.4	74.2	1.2	0.0	2.1	n.a.	3.3		
SW Miramichi	95	Zippin	4	1984	7	24	3.6	1.9	5.4	0.0	0.0	0.0	0.0	0.0		
SW Miramichi	95	CPUE		1993	9	7	98.3	42.3	228.5	12.4		0.0		12.4	5.3	28.3
SW Miramichi	95	CPUE		1994	8	29	220.8	94.5	516.3	31.1		2.5		33.6	14.5	78.1
SW Miramichi	95	CPUE		1997	9	11	217.2	92.9	507.7	31.6		1.2		32.8	14.1	76.3
SW Miramichi	95	CPUE		1998	8	25	12.9	5.6	30.1	54.5		8.0		62.5	26.7	146.2
SW Miramichi	95	CPUE		1999	8	23	178.8	76.6	417.1	20.0		4.1		24.1	10.4	55.9
SW Miramichi	95	CPUE		2000	8	1	176.1	74.9	414.3	48.9		1.1		50.0	21.3	117.3
SW Miramichi	95	CPUE		2001	8	29	206.8	87.8	487.5	43.2		0.6		43.8	18.7	102.5

Appendix 1 (cont'd). Atlantic salmon density estimates and 95% confidence intervals for 1970-2004.

							Density (fish per 100m^2), variance, and/or upper and lower 95% CI									
River	Site	Estimator	Removal Sweeps	Year	Month	Day	Age 0	lower	upper	Age 1	Var 1	Age 2+	Var 2+	Parr	lower	upper
SW Miramichi	95	CPUE		2002	9	12	111.8	47.8	261.5	34.7		1.1		35.9	15.4	83.7
SW Miramichi	95	CPUE		2003	9	25	64.7	27.7	150.7	41.2		1.8		43.0	18.4	100.5
SW Miramichi	95	CPUE		2004	9	16	129.3	55.2	303.1	9.6		2.4		12.0	5.1	27.9
SW Miramichi	96	Zippin	5	1970	7	7	8.5	n.a.	n.a.	0.0	0.0	3.3	0.0	3.3		
SW Miramichi	96	Zippin	5	1971	7	19	2.2	1.4	3.0	4.8	0.0	0.7	-0.4	5.5		
SW Miramichi	96	Zippin	5	1972	7	18	0.0	n.a.	n.a.	3.0	-2.5	1.1	n.a.	4.2		
SW Miramichi	96	Zippin	5	1973	7	24	18.4	13.8	23.0	3.1	0.0	2.8	0.0	5.9		
SW Miramichi	96	Zippin	5	1974	7	30	3.3	n.a.	n.a.	31.0	1.1	0.9	n.a.	31.9		
SW Miramichi	96	Zippin	5	1975	7	30	7.4	5.7	9.0	4.6	0.0	11.6	0.8	16.2		
SW Miramichi	96	Zippin	5	1976	7	29	0.0	n.a.	n.a.	34.8	0.6	3.9	-15.8	38.7		
SW Miramichi	96	Zippin	5	1977	7	28	38.7	35.6	41.8	5.9	2.4	14.6	0.2	20.6		
SW Miramichi	96	Zippin	5	1978	8	3	22.5	17.8	27.1	64.6	0.2	1.9	0.0	66.6		
SW Miramichi	96	Zippin	5	1982	10	14	7.1	6.3	8.0	14.5	0.3	2.7	0.0	17.2		
SW Miramichi	96	Zippin	5	1983	11	3	0.0	n.a.	n.a.	7.0	0.0	8.0	0.0	15.0		
SW Miramichi	96	Zippin	4	1984	7	24	0.0	n.a.	n.a.	2.1	0.0	4.3	-1.6	6.4		
SW Miramichi	96	CPUE		1993	9	7	57.3	24.7	133.0	20.6		2.9		23.5	10.1	54.5
SW Miramichi	120	CPUE		1994	8	22	151.5	65.0	352.9	39.4		5.0		44.4	19.0	103.3
SW Miramichi	120	CPUE		1998	9	21	54.2	23.4	125.8	11.7		9.6		21.3	9.2	49.4
SW Miramichi	120	CPUE		1999	9	7	77.3	33.3	179.3	24.9		1.1		25.9	11.2	60.1
SW Miramichi	120	CPUE		2000	9	14	137.9	58.8	323.4	25.2		8.3		33.5	14.4	78.2
SW Miramichi	120	CPUE		2001	8	21	65.0	27.9	151.4	24.2		8.6		32.9	14.1	76.6
SW Miramichi	120	CPUE		2002	9	25	82.7	35.4	193.0	12.9		3.1		16.0	6.9	37.1
SW Miramichi	120	CPUE		2003	9	24	57.6	24.7	134.3	21.9		9.9		31.8	13.6	74.1
SW Miramichi	120	CPUE		2004	9	21	118.8	50.7	278.1	19.4		11.3		30.8	13.2	71.7
SW Miramichi	121	CPUE		1994	8	22	181.1	77.6	422.6	35.6		5.2		40.8	17.5	95.0
SW Miramichi	121	CPUE		1998	9	21	122.6	52.7	285.4	28.0		2.3		30.3	13.1	70.4
SW Miramichi	121	CPUE		1999	9	7	81.3	35.0	188.9	23.8		2.6		26.4	11.4	61.3
SW Miramichi	121	CPUE		2000	9	14	117.0	50.0	274.0	28.6		7.6		36.2	15.5	84.6
SW Miramichi	121	CPUE		2001	8	30	149.0	63.5	349.7	28.2		2.1		30.4	13.0	70.8
SW Miramichi	121	CPUE		2002	9	25	146.8	62.6	344.6	17.1		2.4		19.5	8.4	45.3
SW Miramichi	121	CPUE		2003	9	24	75.0	32.1	175.0	37.8		2.7		40.5	17.3	94.6
SW Miramichi	121	CPUE		2004	9	21	132.7	56.6	311.0	19.4		7.0		26.4	11.4	61.5
SW Miramichi	122	CPUE		1994	8	22	0.0	n.a.	n.a.	0.0		0.0		0.0	n.a.	n.a.
SW Miramichi	124	CPUE		1994	8	24	32.4	14.0	75.2	5.1		0.0		5.1	2.2	11.9
SW Miramichi	125	CPUE		1994	8	26	246.4	105.3	576.7	89.5		2.3		91.8	39.0	216.3
SW Miramichi	125	CPUE		1996	9	11	158.4	68.0	369.3	71.6		7.2		78.8	33.5	184.9
SW Miramichi	125	CPUE		1997	9	23	108.4	46.6	252.1	48.9		1.6		50.5	21.7	117.8
SW Miramichi	126	CPUE		1994	8	29	86.3	37.2	200.4	15.1		4.4		19.5	8.4	45.2
SW Miramichi	126	CPUE		1997	9	23	205.3	87.9	479.7	36.0		0.9		36.9	15.9	85.8
SW Miramichi	126	CPUE		1998	8	25	86.0	37.0	199.8	42.8		1.2		44.1	18.9	102.6
SW Miramichi	126	CPUE		1999	8	23	154.0	66.1	358.9	42.6		2.2		44.9	19.3	104.6
SW Miramichi	127	CPUE		1994	8	29	215.9	92.4	504.6	29.9		1.3		31.2	13.4	72.5
SW Miramichi	128	CPUE		1994	8	31	78.6	33.8	182.4	33.6		0.0		33.6	14.5	78.1
SW Miramichi	128	CPUE		1995	8	31	51.0	22.0	118.4	0.0		0.0		0.0	n.a.	n.a.
SW Miramichi	129	CPUE		1994	8	31	102.1	43.9	237.3	46.6		10.5		57.1	24.4	133.4
SW Miramichi	129	CPUE		1995	8	31	205.7	88.1	480.6	30.7		11.0		41.7	17.9	97.1
SW Miramichi	129	CPUE		1997	9	11	121.2	52.1	282.0	37.6		5.0		42.6	18.3	99.3
SW Miramichi	129	CPUE		1998	9	21	67.3	29.0	156.2	39.1		3.4		42.4	18.2	98.7
SW Miramichi	129	CPUE		1999	9	7	69.4	29.9	161.1	16.8		2.7		19.5	8.4	45.3
SW Miramichi	129	CPUE		2000	9	14	93.0	39.8	217.3	40.0		7.8		47.9	20.4	112.2
SW Miramichi	129	CPUE		2001	8	21	108.8	46.5	254.6	35.8		6.0		41.8	17.9	97.8
SW Miramichi	129	CPUE		2002	9	25	62.1	26.7	144.8	53.7		3.8		57.5	24.5	135.1
SW Miramichi	129	CPUE		2003	9	24	79.9	34.2	186.4	35.1		6.6		41.7	17.8	97.6
SW Miramichi	129	CPUE		2004	9	21	85.1	36.4	198.6	29.2		4.2		33.4	14.3	77.9
SW Miramichi	130	CPUE		1994	8	31	246.9	105.5	577.9	63.4		9.4		72.8	31.0	170.7
SW Miramichi	150	CPUE		1995	9	1	79.7	34.3	185.0	4.6		0.0		4.6	2.0	10.9
SW Miramichi	150	CPUE		1996	9	4	74.5	32.1	173.0	14.6		0.0		14.6	6.3	33.8
SW Miramichi	150	CPUE		1997	8	29	30.2	13.0	70.2	32.2		3.4		35.6	15.3	82.8
SW Miramichi	200	CPUE		2000	8	2	96.6	41.3	225.8	24.0		3.9		27.9	12.0	64.9
SW Miramichi	200	CPUE		2001	8	28	38.4	16.5	89.4	37.6		4.4		41.9	17.9	98.1
SW Miramichi	200	CPUE		2002	8	29	70.2	30.1	163.7	16.0		2.0		18.0	7.8	41.9
SW Miramichi	200	CPUE		2003	9	17	49.5	21.3	115.3	26.1		5.1		31.2	13.4	72.6
SW Miramichi	200	CPUE		2004	9	20	52.2	22.4	121.6	28.7		1.6		30.3	13.0	70.5
SW Miramichi	203	CPUE		2000	8	29	187.3	79.6	440.8	43.9		2.3		46.2	19.7	108.3
SW Miramichi	204	CPUE		2000	10	13	48.8	20.9	113.5	16.2		2.2		18.4	7.9	42.8
SW Miramichi	206	CPUE		2001	8	29	54.0	23.2	125.9	41.5		1.3		42.8	18.3	100.1
SW Miramichi	206	CPUE		2002	9	12	71.4	30.6	166.6	10.0		0.5		10.5	4.5	24.4

Appendix 1 (cont'd). Atlantic salmon density estimates and 95% confidence intervals for 1970-2004.

River	Site	Estimator	Removal Sweeps	Year	Month	Day	Density (fish per $100m^2$), variance, and/or upper and lower 95% CI									
							Age 0	lower	upper	Age 1	Var 1	Age 2+	Var 2+	Parr	lower	upper
SW Miramichi	206	CPUE		2004	9	16	167.0	71.1	392.5	14.1		2.0		16.1	6.9	37.5
Bartholomew	118	Zippin		1975	8	19	0.8	n.a.	n.a.					7.2	n.a.	n.a.
Bartholomew	118	Zippin		1976	8	28	7.2	n.a.	n.a.					4.9	n.a.	n.a.
Bartholomew	118	Zippin		1977	7	19	87.2	n.a.	n.a.					7.8	n.a.	n.a.
Bartholomew	118	Zippin		1978	7	7	107.1	n.a.	n.a.					24.1	n.a.	n.a.
Bartholomew	118	Zippin		1979	7	14	4.5*	n.a.	n.a.					42.0	n.a.	n.a.
Bartholomew	118	Zippin		1980	7	3	1.8	n.a.	n.a.					17.7	n.a.	n.a.
Bartholomew	118	Zippin		1981	7	14	87.1	n.a.	n.a.					14.9	n.a.	n.a.
Bartholomew	118	Zippin		1984	7	31	7.8	n.a.	n.a.					21.8	n.a.	n.a.
Bartholomew	118	Zippin	3	1989	9	1	44.4	n.a.	n.a.					12.5	n.a.	n.a.
Bartholomew	118	Zippin	3	1990	9	12	27.2	n.a.	n.a.					26.1	n.a.	n.a.
Bartholomew	118	CPUE		1994	8	16	76.2	32.8	177.0	14.9		0.0		14.9	6.4	34.5
Bartholomew	119	Zippin		1970	7	31	2.0	n.a.	n.a.					0.6	n.a.	n.a.
Bartholomew	119	Zippin		1971	7	16	0.5	n.a.	n.a.					0.3	n.a.	n.a.
Bartholomew	119	Zippin		1972	7	12	0.3	n.a.	n.a.					0.0	n.a.	n.a.
Bartholomew	119	Zippin		1973	6	28	18.0*	n.a.	n.a.					0.3*	n.a.	n.a.
Bartholomew	119	Zippin		1974	8	13	24.6	n.a.	n.a.					1.5	n.a.	n.a.
Bartholomew	119	Zippin		1975	8	10	4.9	n.a.	n.a.					4.4	n.a.	n.a.
Bartholomew	119	Zippin		1976	7	22	40.7	n.a.	n.a.					0.8	n.a.	n.a.
Bartholomew	119	Zippin		1977	7	25	95.7	n.a.	n.a.					6.7	n.a.	n.a.
Bartholomew	119	Zippin		1978	7	5	14.7	n.a.	n.a.					7.3	n.a.	n.a.
Bartholomew	119	Zippin		1979	8	1	33.9	n.a.	n.a.					8.0	n.a.	n.a.
Bartholomew	119	Zippin		1980	8	26	42.4	n.a.	n.a.					2.3	n.a.	n.a.
Bartholomew	119	Zippin		1981	7	9	10.6	n.a.	n.a.					0.5	n.a.	n.a.
Bartholomew	119	Zippin		1984	7	25	14.0	n.a.	n.a.					2.6	n.a.	n.a.
Bartholomew	119	Zippin	3	1989	9	7	21.1	n.a.	n.a.					4.4	n.a.	n.a.
Bartholomew	119	Zippin	3	1990	8	28	46.5	n.a.	n.a.					1.1	n.a.	n.a.
Bartholomew	119	CPUE		1994	8	18	188.0	80.5	438.9	30.7		0.0		30.7	13.2	71.3
Bartholomew	119	CPUE		1995	8	18	215.3	92.1	503.2	27.5		7.9		35.4	15.2	82.3
Bartholomew	119	CPUE		1996	9	10	192.6	82.5	449.7	48.3		2.4		50.7	21.7	118.2
Bartholomew	119	CPUE		1997	9	18	201.5	86.3	470.7	56.1		1.0		57.1	24.5	133.4
Bartholomew	119	CPUE		1998	8	18	125.2	53.8	291.4	38.3		0.0		38.3	16.5	89.0
Bartholomew	119	CPUE		1999	9	15	123.8	53.2	288.0	25.2		1.7		26.9	11.6	62.5
Bartholomew	119	CPUE		2000	9	6	180.9	76.9	425.7	27.9		0.7		28.5	12.3	66.4
Bartholomew	119	CPUE		2001	9	13	115.0	49.1	269.2	24.5		3.1		27.6	11.8	64.2
Bartholomew	119	CPUE		2002	9	20	173.8	73.9	408.7	25.8		4.5		30.3	13.0	70.6
Bartholomew	119	CPUE		2003	9	19	143.6	61.2	336.9	25.7		2.8		28.5	12.2	66.4
Bartholomew	119	CPUE		2004	9	20	136.1	58.0	319.2	7.6		2.5		10.2	4.4	23.7
Bartholomew	119.1	Zippin		1974	9	10	100.9	n.a.	n.a.					1.9	n.a.	n.a.
Bartholomew	136	Zippin		1975	8	18	0.4	n.a.	n.a.					8.3	n.a.	n.a.
Bartholomew	136	Zippin		1976	8	2	16.8	n.a.	n.a.					0.4	n.a.	n.a.
Bartholomew	136	Zippin		1976	8	3	9.9	n.a.	n.a.					5.1	n.a.	n.a.
Bartholomew	136	Zippin		1977	7	12	44.0	n.a.	n.a.					5.0	n.a.	n.a.
Bartholomew	136	Zippin		1977	7	12	5.3	n.a.	n.a.					6.4	n.a.	n.a.
Bartholomew	136	Zippin		1978	7	6	43.6	n.a.	n.a.					6.6	n.a.	n.a.
Bartholomew	136	Zippin		1978	7	4	16.6	n.a.	n.a.					22.4	n.a.	n.a.
Bartholomew	136	Zippin		1979	7	5	5.7	n.a.	n.a.					24.5	n.a.	n.a.
Bartholomew	136	Zippin		1980	7	22	2.6	n.a.	n.a.					0.4	n.a.	n.a.
Bartholomew	136	Zippin		1980	7	28	1.4	n.a.	n.a.					5.6	n.a.	n.a.
Bartholomew	136	Zippin		1981	7	7	24.9	n.a.	n.a.					2.3	n.a.	n.a.
Bartholomew	136	Zippin		1981	7	6	36.0	n.a.	n.a.					6.2	n.a.	n.a.
Bartholomew	136	Zippin		1984	7	26	9.7	n.a.	n.a.					3.1	n.a.	n.a.
Bartholomew	136	Zippin		1984	8	9	10.8	n.a.	n.a.					8.8	n.a.	n.a.
Bartholomew	136	Zippin	3	1988	9	7	48.8	n.a.	n.a.					10.1	n.a.	n.a.
Bartholomew	136	Zippin	3	1989	9	6	57.0	n.a.	n.a.					8.7	n.a.	n.a.
Bartholomew	136	Zippin	3	1990	8	30	65.0	n.a.	n.a.					8.5	n.a.	n.a.
Bartholomew	137	Zippin		1977	8	15	4.2	n.a.	n.a.					1.4	n.a.	n.a.
Bartholomew	137	Zippin		1978	7	11	33.1	n.a.	n.a.					4.8	n.a.	n.a.
Bartholomew	137	Zippin		1984	8	7	0.4	n.a.	n.a.					3.1	n.a.	n.a.
Bartholomew	137	Zippin	3	1989	9	26	0.9	n.a.	n.a.					14.1	n.a.	n.a.
Bartholomew	137	Zippin	3	1990	9	19	0.0	n.a.	n.a.					11.7	n.a.	n.a.
Bartholomew	138	Zippin		1976	7	20	7.3	n.a.	n.a.					8.6	n.a.	n.a.
Bartholomew	138	Zippin		1977	7	20	29.2	n.a.	n.a.					8.3	n.a.	n.a.
Bartholomew	138	Zippin		1978	7	17	17.0	n.a.	n.a.					19.4	n.a.	n.a.
Bartholomew	138	Zippin		1979	7	3	0.0	n.a.	n.a.					36.8	n.a.	n.a.
Bartholomew	138	Zippin		1980	7	3	0.4	n.a.	n.a.					29.5	n.a.	n.a.
Bartholomew	138	Zippin		1981	7	16	17.9	n.a.	n.a.					26.8	n.a.	n.a.

Appendix 1 (cont'd). Atlantic salmon density estimates and 95% confidence intervals for 1970-2004.

River	Site	Estimator	Removal Sweeps	Year	Month	Day	Density (fish per 100m²), variance, and/or upper and lower 95% CI									
							Age 0	lower	upper	Age 1	Var 1	Age 2+	Var 2+	Parr	lower	upper
Bartholomew	138	Zippin		1984	8	3	2.2	n.a.	n.a.					8.3	n.a.	n.a.
Bartholomew	138	Zippin	3	1989	7	5	34.9	n.a.	n.a.					8.1	n.a.	n.a.
Bartholomew	138	Zippin	3	1990	9	6	0.7	n.a.	n.a.					21.9	n.a.	n.a.
Bartholomew	139	Zippin		1972	7	5	0.0	n.a.	n.a.					0.6	n.a.	n.a.
Bartholomew	139	Zippin		1973	6	25	17.1	n.a.	n.a.					0.7	n.a.	n.a.
Bartholomew	139	Zippin		1974	8	21	0.8	n.a.	n.a.					6.6	n.a.	n.a.
Bartholomew	139	Zippin		1975	8	13	0.0	n.a.	n.a.					0.0	n.a.	n.a.
Bartholomew	139	Zippin		1975	8	14	0.0	n.a.	n.a.					5.0	n.a.	n.a.
Bartholomew	139	Zippin		1976	7	20	18.3	n.a.	n.a.					2.1	n.a.	n.a.
Bartholomew	139	Zippin		1977	7	20	4.6	n.a.	n.a.					1.6	n.a.	n.a.
Bartholomew	139	Zippin		1978	7	17	87.0	n.a.	n.a.					1.9	n.a.	n.a.
Bartholomew	139	Zippin		1980	7	10	11.0	n.a.	n.a.					3.8	n.a.	n.a.
Bartholomew	139	Zippin		1981	7	20	91.1	n.a.	n.a.					2.2	n.a.	n.a.
Bartholomew	139	Zippin		1984	8	8	0.0	n.a.	n.a.					1.4	n.a.	n.a.
Bartholomew	139	Zippin	3	1988	10	12	4.6	n.a.	n.a.					2.6	n.a.	n.a.
Bartholomew	139	Zippin	3	1989	8	31	35.8	n.a.	n.a.					3.0	n.a.	n.a.
Bartholomew	139	Zippin	3	1990	9	5	0.0	n.a.	n.a.					10.0	n.a.	n.a.
Bartholomew	140	Zippin		1975	8	14	0.0	n.a.	n.a.					7.8	n.a.	n.a.
Bartholomew	140	Zippin		1976	7	27	19.0	n.a.	n.a.					4.9	n.a.	n.a.
Bartholomew	140	Zippin		1977	8	10	0.0	n.a.	n.a.					6.2	n.a.	n.a.
Bartholomew	140	Zippin		1978	7	12	79.6	n.a.	n.a.					4.1	n.a.	n.a.
Bartholomew	140	Zippin		1980	7	10	0.0	n.a.	n.a.					3.5	n.a.	n.a.
Bartholomew	140	Zippin		1981	7	20	24.3	n.a.	n.a.					8.4	n.a.	n.a.
Bartholomew	140	Zippin		1984	8	8	0.0	n.a.	n.a.					2.4	n.a.	n.a.
Bartholomew	140	Zippin	3	1988	9	20	0.0	n.a.	n.a.					0.6	n.a.	n.a.
Bartholomew	140	Zippin	3	1989	8	31	0.5	n.a.	n.a.					0.0	n.a.	n.a.
Bartholomew	140	Zippin	3	1990	8	8	0.0	n.a.	n.a.					0.4	n.a.	n.a.
Bartholomew	141	Zippin		1971	8	25	0.0	n.a.	n.a.					0.0	n.a.	n.a.
Bartholomew	141	Zippin		1974	8	30	0.0	n.a.	n.a.					34.1	n.a.	n.a.
Bartholomew	141	Zippin		1975	8	13	0.0	n.a.	n.a.					11.9	n.a.	n.a.
Bartholomew	141	Zippin		1976	7	6	0.0	n.a.	n.a.					24.1	n.a.	n.a.
Bartholomew	141	Zippin		1977	7	19	41.4	n.a.	n.a.					14.7	n.a.	n.a.
Bartholomew	141	Zippin		1978	7	12	97.9	n.a.	n.a.					40.3	n.a.	n.a.
Bartholomew	141	Zippin		1979	7	4	0.0	n.a.	n.a.					33.3	n.a.	n.a.
Bartholomew	141	Zippin		1980	7	2	2.8	n.a.	n.a.					37.1	n.a.	n.a.
Bartholomew	141	Zippin		1981	7	16	58.5	n.a.	n.a.					19.0	n.a.	n.a.
Bartholomew	141	Zippin		1984	8	2	1.2	n.a.	n.a.					8.5	n.a.	n.a.
Bartholomew	141	Zippin	3	1988	8	24	22.1	n.a.	n.a.					17.5	n.a.	n.a.
Bartholomew	141	Zippin	3	1989	9	5	73.0	n.a.	n.a.					18.2	n.a.	n.a.
Bartholomew	141	Zippin	3	1990	7	31	0.0	n.a.	n.a.					16.7	n.a.	n.a.
Bartholomew	142	Zippin		1976	9	10	0.0	n.a.	n.a.					1.1	n.a.	n.a.
Bartholomew	142	Zippin		1977	8	4	0.0	n.a.	n.a.					1.4	n.a.	n.a.
Bartholomew	142	Zippin		1978	7	18	19.4	n.a.	n.a.					43.1	n.a.	n.a.
Bartholomew	142	Zippin		1980	7	15	0.0	n.a.	n.a.					3.9	n.a.	n.a.
Bartholomew	142	Zippin		1984	8	7	0.4	n.a.	n.a.					3.2	n.a.	n.a.
Bartholomew	142	Zippin	3	1988	8	18	0.0	n.a.	n.a.					1.2	n.a.	n.a.
Bartholomew	142	Zippin	3	1989	8	29	0.0	n.a.	n.a.					1.3	n.a.	n.a.
Bartholomew	142	Zippin	3	1990	8	23	0.0	n.a.	n.a.					0.8	n.a.	n.a.
Bartholomew	164	Zippin		1970	7	28	0.0	n.a.	n.a.					11.0	n.a.	n.a.
Bartholomew	165	Zippin		1970	7	30	1.4	n.a.	n.a.					2.1	n.a.	n.a.
Bartholomew	165	Zippin		1971	7	27	2.1	n.a.	n.a.					0.6	n.a.	n.a.
Bartholomew	165	Zippin		1972	7	10	0.8	n.a.	n.a.					0.0	n.a.	n.a.
Bartholomew	165	Zippin		1973	7	4	7.4	n.a.	n.a.					1.0	n.a.	n.a.
Bartholomew	165	Zippin		1974	8	21	16.1	n.a.	n.a.					3.2	n.a.	n.a.
Bartholomew	165	Zippin		1975	8	17	0.3	n.a.	n.a.					0.0	n.a.	n.a.
Bartholomew	165	Zippin		1976	8	1	10.1	n.a.	n.a.					0.0	n.a.	n.a.
Bartholomew	165	Zippin		1977	7	21	17.7	n.a.	n.a.					0.3	n.a.	n.a.
Bartholomew	165	Zippin		1978	7	13	21.2	n.a.	n.a.					0.7	n.a.	n.a.
Bartholomew	165	Zippin		1984	8	1	0.8	n.a.	n.a.					1.5	n.a.	n.a.
Bartholomew	166	Zippin		1975	8	11	128.2	n.a.	n.a.					29.7	n.a.	n.a.
Bartholomew	166	Zippin		1976	7	30	70.6	n.a.	n.a.					21.1	n.a.	n.a.
Bartholomew	167	Zippin		1975	8	18	0.0	n.a.	n.a.					0.4	n.a.	n.a.
Bartholomew	167	Zippin		1976	7	23	22.1	n.a.	n.a.					2.3	n.a.	n.a.
Bartholomew	167	Zippin		1977	7	4	1.2	n.a.	n.a.					4.0	n.a.	n.a.
Bartholomew	167	Zippin		1978	7	10	18.7	n.a.	n.a.					15.2	n.a.	n.a.
Bartholomew	167	Zippin		1979	7	9	0.3	n.a.	n.a.					12.6	n.a.	n.a.
Bartholomew	167	Zippin		1980	7	9	39.4	n.a.	n.a.					4.9	n.a.	n.a.

Appendix 1 (cont'd). Atlantic salmon density estimates and 95% confidence intervals for 1970-2004.

			Removal				Density (fish per 100m²), variance, and/or upper and lower 95% CI									
River	Site	Estimator	Sweeps	Year	Month	Day	Age 0	lower	upper	Age 1	Var 1	Age 2+	Var 2+	Parr	lower	upper
Bartholomew	167	Zippin		1981	7	10	49.0	n.a.	n.a.					3.8	n.a.	n.a.
Bartholomew	167	Zippin		1984	7	30	5.5	n.a.	n.a.					3.0	n.a.	n.a.
Bartholomew	168	Zippin		1976	7	12	11.8	n.a.	n.a.					1.2	n.a.	n.a.
Bartholomew	168	Zippin		1977	8	4	34.8	n.a.	n.a.					3.8	n.a.	n.a.
Bartholomew	168	Zippin		1978	7	11	68.6	n.a.	n.a.					4.2	n.a.	n.a.
Bartholomew	168	Zippin		1979	7	9	28.5	n.a.	n.a.					10.7	n.a.	n.a.
Bartholomew	168	Zippin		1980	7	22	0.3	n.a.	n.a.					0.0	n.a.	n.a.
Bartholomew	168	Zippin		1981	7	13	15.6	n.a.	n.a.					0.4	n.a.	n.a.
Cains	74	Zippin	5	1972	8	31	28.8	19.4	38.2	48.9	4.1	18.4	6.4	67.3		
Cains	74	Zippin	5	1973	8	24	26.1	19.5	32.7	0.0	0.0	0.5	-0.1	0.5		
Cains	74	Zippin	5	1974	8	29	64.5	n.a.	n.a.	13.2	0.1	0.0	0.0	13.2		
Cains	74	Zippin	5	1975	7	24	47.4	32.9	61.9	2.5	0.2	0.2	n.a.	2.7		
Cains	74	Zippin	5	1976	9	10	32.0	30.5	33.5	10.2	16.0	0.0	0.0	10.2		
Cains	74	Zippin	5	1977	8	26	39.2	n.a.	n.a.	11.8	0.5	0.0	0.0	11.8		
Cains	74	Zippin	5	1978	8	24	34.8	33.6	36.1	10.8	0.3	2.1	0.1	12.9		
Cains	74	Zippin	5	1979	9	3	40.1	n.a.	n.a.	11.1	0.9	3.3	0.0	14.4		
Cains	74	Zippin	5	1980	9	8	31.4	25.0	37.8	6.9	1.8	1.9	0.1	8.8		
Cains	74	Zippin	5	1981	9	17	85.8	83.1	88.5	3.5	0.0	2.4	0.0	5.9		
Cains	74	Zippin	5	1982	8	12	24.9	24.0	25.8	1.4	n.a.	4.9	0.0	6.3		
Cains	74	Zippin	5	1983	8	23	133.5	n.a.	n.a.	8.9	2.0	0.9	n.a.	9.8		
Cains	74	Zippin	4	1984	8	1	18.9	17.3	20.6	2.3	0.0	0.0	0.0	2.3		
Cains	74	Zippin	4	1985	8	8	126.0	118.2	133.9	4.9	0.0	2.9	n.a.	7.8		
Cains	74	Zippin	4	1986	9	3	119.4	111.3	127.6	15.7	1.9	4.5	5.3	20.2		
Cains	74	Zippin	4	1987	7	23	93.5	88.4	98.6	12.9	0.3	0.6	0.0	13.5		
Cains	74	Zippin	4	1988	7	21	246.4	n.a.	n.a.	9.9	0.3	0.3	n.a.	10.1		
Cains	74	Zippin	4	1989	7	20	29.2	18.2	40.2	14.7	0.8	0.4	n.a.	15.1		
Cains	74	Zippin	4	1990	7	20	112.7	102.5	122.8	7.3	18.4	1.5	0.0	8.7		
Cains	74	Zippin	3	1992	7	20	118.4	111.8	124.9	45.2	6.1	1.9	0.0	47.0		
Cains	74	Zippin	4	1993	8	9	103.1	87.6	118.6	14.0		0.0		14.0	6.5	21.5
Cains	74	Zippin	3	1994	8	3	149.3	139.2	159.3	48.7		5.3		54.0	41.7	66.3
Cains	74	Zippin	3	1995	8	28	177.1	147.9	206.2	27.0		6.4		33.4	26.0	40.8
Cains	74	CPUE		1996	9	13	191.7	82.1	447.5	24.7		4.4		29.1	12.5	67.5
Cains	74	Zippin	3	1997	9	12	165.3	155.8	174.9	16.6		0.5		17.1	9.7	24.5
Cains	74	Zippin	3	1998	7	31	177.8	170.4	185.2	51.5		12.4		63.9	49.1	78.7
Cains	74	Zippin	3	1999	8	24	156.9	142.7	171.2	47.1		7.8		54.8	40.3	69.4
Cains	74	Zippin	3	2000	8	16	196.7	194.7	198.6	16.4		7.2		23.6	17.1	30.1
Cains	74	Zippin	3	2001	8	28	123.6	112.7	134.5	48.8		5.4		54.2	37.1	71.3
Cains	74	Zippin	3	2002	8	29	216.3	204.6	228.0	49.3		11.8		61.1	50.4	71.8
Cains	74	Zippin	3	2003	9	17	84.0	75.4	92.5	27.7		1.8		29.5	22.7	36.3
Cains	74	Zippin	3	2004	9	27	123.3	116.0	130.7	30.4		6.0		36.4	27.2	45.6
Cains	75	Zippin	4	1971	9	1	12.4	n.a.	n.a.	0.3	0.0	0.0	0.0	0.3		
Cains	75	Zippin	4	1972	8	29	9.7	9.4	10.0	1.4	0.1	0.0	n.a.	1.4		
Cains	75	Zippin	5	1973	8	30	6.6	n.a.	n.a.	0.7	n.a.	0.0	0.0	0.7		
Cains	75	Zippin	5	1974	8	20	55.1	45.0	65.2	3.8	0.0	0.3	n.a.	4.1		
Cains	75	Zippin	5	1975	8	18	46.3	43.4	49.3	3.7	-21.8	2.1	0.0	5.8		
Cains	75	Zippin	5	1976	8	24	27.0	9.4	44.6	1.8	n.a.	0.0	0.0	1.8		
Cains	75	Zippin	5	1977	8	12	65.4	55.1	75.8	0.8	-0.3	0.8	n.a.	1.6		
Cains	75	Zippin	5	1978	8	9	21.8	17.4	26.3	0.0	0.0	2.3	0.3	2.3		
Cains	75	Zippin	5	1979	8	21	15.9	n.a.	n.a.	0.0	0.0	0.0	0.0	0.0		
Cains	75	Zippin	5	1980	9	10	8.3	5.4	11.1	0.0	0.0	0.0	0.0	0.0		
Cains	75	Zippin	5	1981	7	28	14.4	11.4	17.4	0.0	0.0	0.0	0.0	0.0		
Cains	75	Zippin	5	1982	9	21	11.2	9.4	13.0	0.0	0.0	0.4	n.a.	0.4		
Cains	75	Zippin	5	1983	9	1	33.7	32.5	35.0	1.1	0.0	0.0	0.0	1.1		
Cains	75	Zippin	4	1984	8	27	17.5	9.0	26.0	3.9	33.0	0.0	0.0	3.9		
Cains	75	Zippin	4	1985	8	14	50.1	47.3	52.9	0.0	0.0	0.0	0.0	0.0		
Cains	75	Zippin	4	1986	9	2	26.6	21.3	31.9	0.0	0.0	0.0	0.0	0.0		
Cains	75	Zippin	4	1987	7	20	65.9	45.1	86.7	1.1	n.a.	0.0	0.0	1.1		
Cains	75	Zippin	4	1988	7	18	65.8	-49.5	181.1	3.1	0.2	1.5	n.a.	4.6		
Cains	75	Zippin	4	1989	7	17	25.9	n.a.	n.a.	2.7	-1.9	0.0	0.0	2.7		
Cains	75	Zippin	4	1990	7	10	58.4	n.a.	n.a.	5.6	0.7	0.0	0.0	5.6		
Cains	75	Zippin	4	1993	8	4	49.1	9.8	88.3	9.9		0.8		10.8	10.4	11.1
Cains	75	CPUE		1996	9	12	65.7	28.3	152.3	2.6		2.0		4.6	2.0	10.8
Cains	75	CPUE		1997	9	12	83.4	35.9	193.7	16.8		0.0		16.8	7.3	39.1
Cains	75	CPUE		1999	9	2	120.9	52.0	281.2	14.2		1.8		16.1	6.9	37.3
Cains	75	CPUE		2000	8	4	86.9	37.2	202.9	0.0		0.0		0.0	n.a.	n.a.
Cains	75	CPUE		2001	9	10	31.2	13.4	72.7	15.2		0.0		15.2	6.5	35.3
Cains	75	CPUE		2002	9	20	62.7	26.9	146.2	4.0		0.0		4.0	1.7	9.3

Appendix 1 (cont'd). Atlantic salmon density estimates and 95% confidence intervals for 1970-2004.

			Removal				Density (fish per $100m^2$), variance, and/or upper and lower 95% CI									
River	Site	Estimator	Sweeps	Year	Month	Day	Age 0	lower	upper	Age 1	Var 1	Age 2+	Var 2+	Parr	lower	upper
Cains	75	CPUE		2003	9	19	30.9	13.3	71.8	6.0		0.0		6.0	2.6	14.1
Cains	75	CPUE		2004	9	13	36.0	15.5	83.9	0.0		0.0		0.0	n.a.	n.a.
Cains	76	Zippin	5	1971	8	19	6.7	1.1	12.4	1.5	0.0	1.5	n.a.	2.9		
Cains	76	Zippin	5	1972	8	17	9.2	7.9	10.5	0.5	0.0	1.8	0.0	2.3		
Cains	76	Zippin	5	1973	8	20	11.9	9.4	14.4	0.5	n.a.	1.0	n.a.	1.5		
Cains	76	Zippin	5	974	8	21	20.3	13.4	27.3	4.6	0.0	0.0	0.0	4.6		
Cains	76	Zippin	5	1975	8	15	32.0	n.a.	n.a.	3.1	n.a.	4.1	n.a.	7.1		
Cains	76	Zippin	5	1976	8	24	15.2	n.a.	n.a.	3.8	n.a.	1.6	n.a.	5.4		
Cains	76	Zippin	5	1977	8	11	39.7	36.2	43.1	1.3	0.0	0.0	0.0	1.3		
Cains	76	Zippin	5	1978	8	8	11.9	9.3	14.6	1.7	0.0	2.1	0.0	3.7		
Cains	76	Zippin	5	1979	8	20	11.3	10.9	11.8	0.5	n.a.	1.1	-0.6	1.6		
Cains	76	Zippin	5	1981	9	18	33.0	31.7	34.3	0.0	0.0	2.2	0.0	2.2		
Cains	76	Zippin	5	1982	9	21	13.5	11.7	15.3	1.8	n.a.	3.6	-20.3	5.4		
Cains	76	Zippin	5	1983	7	15	26.9	25.4	28.3	0.4	n.a.	0.0	0.0	0.4		
Cains	76	Zippin	4	1984	8	2	27.6	15.1	40.1	0.0	0.0	2.0	n.a.	2.0		
Cains	76	Zippin	4	1985	8	29	72.6	67.7	77.5	3.3	-2.0	3.8	-3.2	7.1		
Cains	76	CPUE		1993	9	8	28.1	12.1	65.2	8.9		0.0		8.9	3.8	20.7
Cains	76	CPUE		1994	8	3	73.0	31.5	169.4	12.7		0.0		12.7	5.4	29.4
Cains	76	CPUE		1997	9	11	97.7	42.1	227.1	10.5		0.0		10.5	4.5	24.4
Cains	77	Zippin	5	1971	8	11	14.3	13.3	15.2	3.0	0.0	1.5	-0.5	4.5		
Cains	77	Zippin	5	1972	8	16	4.8	4.8	4.8	6.7	n.a.	4.8	0.1	11.5		
Cains	77	Zippin	5	1973	9	12	38.8	n.a.	n.a.	1.5	0.0	0.3	n.a.	1.8		
Cains	77	Zippin	5	1974	9	9	37.0	32.4	41.6	14.6	0.4	2.7	53.4	17.3		
Cains	77	Zippin	5	1975	8	6	51.3	42.7	59.8	12.4	0.2	2.0	0.0	14.4		
Cains	77	Zippin	5	1976	9	13	24.4	23.1	25.8	17.4	1.9	9.6	0.6	27.0		
Cains	77	Zippin	5	1977	8	4	85.1	81.0	89.1	5.2	0.0	4.4	0.0	9.6		
Cains	77	Zippin	5	1978	8	8	89.8	n.a.	n.a.	13.0	0.2	2.8	0.0	15.8		
Cains	77	Zippin	5	1979	9	4	23.3	19.6	26.9	1.8	0.0	4.2	0.0	6.0		
Cains	77	Zippin	5	1980	8	14	16.8	14.1	19.4	0.8	0.0	0.3	n.a.	1.0		
Cains	77	Zippin	5	1981	8	31	46.8	44.1	49.4	3.9	0.0	3.9	0.1	7.8		
Cains	77	Zippin	5	1982	9	22	26.6	24.2	29.0	3.1	1.0	9.7	0.2	12.8		
Cains	77	Zippin	5	1983	8	26	59.9	56.5	63.3	11.7	3.3	0.0	0.0	11.7		
Cains	77	Zippin	4	1984	9	20	19.7	16.9	22.5	6.2	2.1	0.0	0.0	6.2		
Cains	77	Zippin	4	1985	7	29	67.6	64.3	71.0	4.4	0.2	1.5	0.0	5.9		
Cains	77	Zippin	4	1986	7	25	67.6	64.7	70.5	14.4	1.9	7.0	5.3	21.4		
Cains	77	Zippin	4	1987	7	22	165.5	161.5	169.6	21.6	14.1	2.3	0.0	23.9		
Cains	77	Zippin	3	1988	7	11	157.4	150.7	164.1	4.7	-9.4	0.5	n.a.	5.2		
Cains	77	Zippin	4	1989	7	11	167.6	n.a.	n.a.	25.4	1.9	0.0	0.0	25.4		
Cains	77	Zippin	4	1990	7	11	279.3	262.2	296.3	8.1	26.4	1.2	0.0	9.3		
Cains	77	Zippin	4	1992	7	30	187.2	n.a.	n.a.	6.1	0.0	0.0	0.0	6.1		
Cains	77	Zippin	4	1993	8	10	104.7	98.2	111.3	14.4		0.0		14.4	13.9	14.8
Cains	77	Zippin	3	1994	8	15	76.6	61.7	91.5	22.3		3.1		25.4	21.9	28.9
Cains	77	Zippin	3	1995	8	29	94.1	86.9	101.3	34.1		3.1		37.2	33.2	41.1
Cains	77	CPUE		1996	9	12	86.2	37.1	200.3	9.8		0.5		10.3	4.4	24.0
Cains	77	CPUE		1997	9	11	16.6	7.2	38.7	8.5		0.0		8.5	3.6	19.7
Cains	77	CPUE		1998	8	24	49.3	21.2	114.2	20.7		1.2		21.9	9.4	50.8
Cains	77	CPUE		1999	9	2	111.8	48.1	260.0	42.3		1.0		43.3	18.6	100.8
Cains	77	CPUE		2000	8	3	72.3	31.0	168.5	21.0		2.2		23.3	10.0	54.1
Cains	77	CPUE		2001	9	10	29.4	12.7	68.5	29.2		3.3		32.5	13.9	75.7
Cains	77	CPUE		2002	9	13	65.7	28.2	153.2	38.6		6.4		45.1	19.3	105.5
Cains	77	CPUE		2003	9	16	15.7	6.7	36.5	17.5		0.7		18.3	7.9	42.5
Cains	77	CPUE		2004	9	13	66.5	28.5	155.1	8.5		6.3		14.8	6.4	34.4
Cains	78	Zippin	5	1971	8	16	48.5	47.3	49.7	3.7	0.0	0.0	0.0	3.7		
Cains	78	CPUE		1993	9	8	23.4	10.1	54.3	22.9		2.5		25.4	10.9	58.9
Cains	78	CPUE		1994	8	24	102.3	44.0	237.9	26.7		0.0		26.7	11.5	62.0
Cains	78	CPUE		1996	9	12	86.8	37.4	201.7	11.9		3.1		15.0	6.4	34.7
Cains	78	CPUE		1997	9	17	45.0	19.4	104.5	17.5		1.0		18.6	8.0	43.1
Cains	78	CPUE		1998	8	24	51.0	22.0	118.4	8.0		0.0		8.0	3.4	18.6
Cains	78	CPUE		1999	9	2	229.9	98.3	537.6	62.4		2.9		65.3	27.9	152.9
Cains	78	CPUE		2000	8	3	93.1	39.8	217.5	15.2		0.0		15.2	6.6	35.4
Cains	78	CPUE		2001	9	10	69.6	29.9	162.3	31.3		2.8		34.1	14.6	79.5
Cains	78	CPUE		2002	9	13	154.5	65.8	362.9	19.0		2.6		21.6	9.3	50.3
Cains	78	CPUE		2003	9	16	23.6	10.1	54.9	8.3		0.0		8.3	3.6	19.4
Cains	78	CPUE		2004	9	13	101.0	43.2	236.1	14.7		11.4		26.2	11.2	60.9
Cains	79	Zippin	3	2004	9	22	132.2	128.6	135.8	22.0		1.6		23.6	19.2	28.0
Cains	110	CPUE		1994	8	2	225.3	96.4	526.9	56.5		3.1		59.6	25.5	139.3
Cains	110	CPUE		1997	8	26	198.7	85.1	464.1	80.6		4.0		84.6	36.0	198.9

Appendix 1 (cont'd). Atlantic salmon density estimates and 95% confidence intervals for 1970-2004.

River	Site	Estimator	Removal Sweeps	Year	Month	Day	Density (fish per 100m²), variance, and/or upper and lower 95% CI									
							Age 0	lower	upper	Age 1	Var 1	Age 2+	Var 2+	Parr	lower	upper
Cains	174	CPUE		1997	9	11	0.0	n.a.	n.a.	10.2		0.0		10.2	4.4	23.7
Cains	178	CPUE		1997	8	29	29.4	12.7	68.2	44.6		2.6		47.2	20.3	110.0
Cains	198	CPUE		1998	8	24	0.0	n.a.	n.a.	8.8		2.5		11.3	4.9	26.3
Cains	202	CPUE		2000	8	4	54.4	23.3	126.7	14.7		1.0		15.7	6.8	36.5
Cains	211	CPUE		1997	9	16	0.0	n.a.	n.a.	5.8		4.7		10.5	4.5	24.5
Cains	212	CPUE		2001	8	16	0.0	n.a.	n.a.	16.8		0.0		16.8	7.2	39.1
Cains	212	CPUE		2002	9	18	49.6	21.3	115.4	9.7		2.1		11.8	5.1	27.4
Cains	212	CPUE		2003	9	19	7.1	3.0	16.7	8.4		2.4		10.8	4.6	25.1
Cains	212	CPUE		2004	9	23	29.3	12.6	68.2	9.6		2.4		12.0	5.1	27.9
Cains	213	CPUE		2002	8	29	91.1	39.0	213.0	7.4		1.3		8.8	3.8	20.4
Cains	213	CPUE		2004	9	29	75.9	32.5	177.1	11.4		5.7		17.1	7.4	39.7
Taxis	86	Zippin	5	1972	7	25	1.1	n.a.	n.a.	6.4	74.5	1.9	n.a.	8.2		
Taxis	86	Zippin	5	1973	8	20	6.8	3.2	10.4	2.5	n.a.	5.5	2.6	8.0		
Taxis	86	Zippin	5	1974	7	31	40.0	n.a.	n.a.	5.9	0.0	1.3	-1.8	7.1		
Taxis	86	Zippin	5	1975	7	31	25.5	23.9	27.1	20.0	n.a.	2.8	0.0	22.8		
Taxis	86	Zippin	5	1976	9	1	28.9	27.4	30.4	15.2	0.1	8.5	0.2	23.7		
Taxis	86	Zippin	5	1977	8	9	34.1	29.2	39.1	15.9	0.4	4.4	0.7	20.3		
Taxis	86	Zippin	5	1978	8	22	13.1	11.8	14.5	21.3	4.0	3.2	0.0	24.5		
Taxis	86	Zippin	5	1980	8	28	19.8	18.5	21.0	7.3	0.2	2.0	0.0	9.3		
Taxis	86	Zippin	5	1981	9	3	51.7	47.9	55.5	12.3	0.7	0.5	n.a.	12.8		
Taxis	86	Zippin	5	1982	9	14	4.0	3.2	4.9	9.7	0.1	0.7	0.0	10.5		
Taxis	86	Zippin	5	1983	8	25	16.4	14.6	18.2	5.0	0.0	5.2	0.5	10.2		
Taxis	86	Zippin	4	1984	8	7	11.8	9.0	14.6	6.0	0.0	1.3	0.0	7.3		
Taxis	86	CPUE		1993	9	2	40.7	17.6	94.4	22.4		2.5		24.9	10.7	57.8
Taxis	86	CPUE		1994	8	18	52.5	22.6	121.8	41.8		3.4		45.2	19.4	105.3
Taxis	86	CPUE		1995	8	31	52.3	22.5	121.3	53.3		7.2		60.6	25.9	141.6
Taxis	86	CPUE		1996	9	11	109.7	47.2	255.1	21.1		0.6		21.7	9.4	50.4
Taxis	86	CPUE		1997	9	24	82.2	35.4	191.0	58.9		3.0		61.9	26.5	144.9
Taxis	86	CPUE		1998	9	16	30.9	13.3	71.7	16.6		2.9		19.5	8.4	45.3
Taxis	86	CPUE		1999	9	13	56.3	24.3	130.6	77.0		9.6		86.6	36.8	203.7
Taxis	86	CPUE		2000	9	11	80.2	34.4	187.2	16.3		5.6		21.9	9.4	50.8
Taxis	86	CPUE		2001	8	30	75.4	32.3	175.9	37.2		0.7		37.9	16.2	88.5
Taxis	86	CPUE		2002	9	27	38.4	16.5	89.4	14.1		1.0		15.1	6.5	35.2
Taxis	86	CPUE		2003	9	22	51.0	21.9	118.8	32.5		2.1		34.6	14.8	80.8
Taxis	86	CPUE		2004	9	24	45.9	19.7	107.0	15.4		17.0		32.4	13.9	75.5
Taxis	87	Zippin	5	1972	8	3	8.1	3.4	12.8	13.8	0.3	4.4	0.0	18.2		
Taxis	87	Zippin	5	1973	9	6	4.5	n.a.	n.a.	3.2	n.a.	3.4	n.a.	6.6		
Taxis	87	Zippin	5	1974	7	24	30.9	29.9	31.8	3.7	21.3	0.6	0.0	4.3		
Taxis	87	Zippin	5	1975	8	19	77.7	75.0	80.3	32.7	n.a.	3.1	0.0	35.8		
Taxis	87	Zippin	5	1976	9	1	51.9	45.2	58.6	26.1	1.3	11.3	0.8	37.4		
Taxis	87	Zippin	5	1977	8	16	59.1	n.a.	n.a.	24.7	1.9	6.3	4.2	31.0		
Taxis	87	Zippin	5	1978	8	15	10.0	n.a.	n.a.	19.4	0.3	1.0	n.a.	20.4		
Taxis	87	Zippin	5	1979	9	5	12.9	11.7	14.1	7.7	0.1	4.0	3.5	11.6		
Taxis	87	CPUE		1993	9	9	147.3	63.2	343.3	42.9		3.5		46.4	19.9	108.2
Taxis	88	Zippin	5	1972	7	24	2.9	1.2	4.7	10.6	n.a.	1.3	0.0	11.9		
Taxis	88	Zippin	5	1973	9	6	37.4	28.7	46.1	3.9	n.a.	5.3	1.2	9.2		
Taxis	88	Zippin	5	1974	7	24	64.9	n.a.	n.a.	31.5	7.7	1.5	0.0	33.0		
Taxis	88	Zippin	5	1975	7	21	42.3	n.a.	n.a.	35.4	0.4	9.5	0.0	44.9		
Taxis	88	Zippin	5	1976	9	4	59.0	n.a.	n.a.	34.6	0.3	10.9	0.0	45.5		
Taxis	88	Zippin	5	1977	8	4	91.7	n.a.	n.a.	24.7	0.2	7.7	0.1	32.4		
Taxis	88	Zippin	5	1978	8	15	33.0	30.8	35.2	36.9	1.0	5.3	2.7	42.2		
Taxis	88	Zippin	5	1979	9	20	23.8	22.0	25.7	7.6	50.0	4.0	-4.3	11.6		
Taxis	88	Zippin	5	1980	8	20	28.6	27.4	29.8	14.6	0.6	2.0	0.0	16.6		
Taxis	88	Zippin	5	1981	8	4	53.6	49.7	57.5	15.2	4.2	2.9	0.0	18.2		
Taxis	88	Zippin	5	1982	8	30	13.9	12.1	15.6	32.4	0.5	4.0	-8.7	36.4		
Taxis	88	Zippin	5	1983	8	30	9.5	9.2	9.7	15.2	0.0	6.5	0.0	21.7		
Taxis	88	Zippin	4	1984	7	19	12.5	10.0	15.0	8.5	0.8	3.2	-9.0	11.7		
Taxis	88	Zippin	4	1985	7	30	31.1	27.8	34.5	20.0	0.5	4.7	0.0	24.7		
Taxis	88	Zippin	4	1986	8	5	46.6	42.6	50.7	8.6	1.3	6.6	1.3	15.2		
Taxis	88	CPUE		1993	9	9	90.8	39.1	210.8	49.3		9.4		58.7	25.1	137.2
Taxis	88	CPUE		1994	8	26	94.8	40.8	220.4	79.5		14.5		94.0	39.9	221.5
Taxis	88	CPUE		1997	9	18	63.8	27.5	148.0	72.5		5.8		78.3	33.4	183.9
Taxis	88	CPUE		1998	9	16	60.4	26.0	140.2	47.9		10.6		58.4	25.0	136.5
Taxis	88	CPUE		1999	9	1	77.1	33.2	178.9	54.3		8.1		62.4	26.7	146.0
Taxis	88	CPUE		2000	9	21	126.2	53.9	295.6	50.0		7.5		57.5	24.5	135.2
Taxis	88	CPUE		2001	8	30	59.0	25.3	137.4	61.9		3.5		65.4	27.8	154.1
Taxis	88	CPUE		2002	9	27	84.1	36.0	196.3	35.4		4.6		40.0	17.1	93.4

Appendix 1 (cont'd). Atlantic salmon density estimates and 95% confidence intervals for 1970-2004.

			Removal				Density (fish per 100m²), variance, and/or upper and lower 95% CI									
River	Site	Estimator	Sweeps	Year	Month	Day	Age 0	lower	upper	Age 1	Var 1	Age 2+	Var 2+	Parr	lower	upper
Taxis	88	CPUE		2003	9	22	33.8	14.5	78.5	45.4		3.3		48.7	20.8	114.1
Taxis	88	CPUE		2004	9	24	45.4	19.5	105.6	23.9		8.0		31.9	13.7	74.4
Taxis	192	CPUE		1998	9	17	132.0	56.7	307.2	14.4		0.0		14.4	6.2	33.5
Taxis	193	CPUE		1998	9	18	61.8	26.6	143.4	24.5		0.0		24.5	10.6	56.9
Taxis	194	CPUE		1998	9	18	18.8	8.1	43.6	31.0		0.9		31.9	13.7	74.0
Taxis	195	CPUE		1998	9	17	70.5	30.4	163.6	19.0		3.3		22.3	9.6	51.8
Taxis	195	CPUE		2000	10	13	73.1	31.4	170.6	35.3		5.9		41.2	17.6	96.2
Taxis	195	CPUE		2001	8	30	68.1	29.2	158.8	63.5		4.2		67.7	28.7	159.5
Taxis	195	CPUE		2002	9	18	63.9	27.4	148.9	27.8		3.7		31.5	13.5	73.3
Taxis	195	CPUE		2004	9	24	56.2	24.1	130.9	21.2		4.9		26.1	11.2	60.6
Taxis	196	CPUE		1998	9	17	94.8	40.8	220.2	44.1		4.2		48.3	20.7	112.7
Taxis	197	CPUE		1998	9	17	117.1	50.3	272.3	15.0		0.0		15.0	6.5	34.8

Appendix 2. Atlantic salmon mean length (cm), mean weight (g), Percent Habitat Saturation (PHS), and biomass (g per 100 m²) by site and year sampled for 1970-2004.

River	Site	Year	Month	Day	Average Fork Length (cm)				Average Whole Weight (g)				Percent Habitat Saturation					Biomass (g per 100 m²)			
					Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	All Parr	Total	Age 0	Age 1	Age 2+	Total
NW Millstream	134	1982	8	31	5.7			9.2	2.0			8.8	3.3			19.2	22.5	41.2			334.4
NW Millstream	134	1994	9	1	4.9	8.4	11.9	8.8	1.3	6.7	19.2	7.8	13.7	28.6	9.5		51.8	163.0	469.2	74.1	706.3
NW Millstream	134	1998	8	28	4.9	7.7	11.2		1.3	5.1	15.9		9.1	9.6	2.9		21.6	106.0	140.9	20.7	267.6
NW Millstream	134	1999	9	1	4.8	7.7			1.3	5.1			15.6	17.8	0.0		33.4	184.3	252.8	0.0	437.1
NW Millstream	134	2000	10	4	5.8	9.0	13.0		2.1	7.9	22.5		11.0	15.7	5.9		32.6	134.5	244.3	41.1	419.9
NW Millstream	134	2001	9	11	5.4	8.1	11.6		1.9	6.2	19.1		8.8	9.8	3.8		22.4	110.9	155.4	30.3	296.6
NW Millstream	134	2002	9	6	5.3	9.0	11.8		1.9	8.7	19.9		4.3	6.8	5.8		16.9	55.6	122.8	43.7	222.1
NW Millstream	134	2003	8	28	5.4	9.0	11.6		1.8	9.4	17.1		2.2	3.8	9.7		15.7	25.3	105.6	66.0	196.9
NW Millstream	134	2004	8	24	5.7		11.4		2.1		18.1		1.7	0.0	22.6		24.3	21.9	0.0	401.1	423.0
NW Millstream	135	1975	9	11				10.3				12.3	0.0			7.7	7.7	0.0			123.6
NW Millstream	135	1976	8	31	6.3			12.7	2.8			23.3	3.7			2.4	6.0	48.0			88.9
NW Millstream	135	1978	8	28	5.6			11.3	1.9			16.3	2.9			4.4	7.3	35.7			108.7
NW Millstream	135	1979	7	12	4.3			9.9	0.9			11.0	0.3			1.1	1.4	3.3			21.0
NW Millstream	135	1980	9	29	6.7			11.5	3.4			17.1	0.6			5.8	6.4	7.7			104.2
NW Millstream	135	1981	7	22	3.8				0.6				0.2			0.0	0.2	2.3			2.3
NW Millstream	135	1982	9	22	5.8			9.6	2.2			9.9	3.3			14.8	18.1	41.6			271.7
NW Millstream	135	1983	8	29	6.1			11.2	2.6			15.9	2.9			10.2	13.1	37.5			205.8
NW Millstream	135	1994	9	2		8.5	12.3	9.4		6.9	21.2	9.5	0.0	12.7	11.3		24.0	0.0	219.5	85.4	304.9
NW Millstream	135	1997	10	1									0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW Millstream	135	1998	8	6			12.0				19.6		0.0	0.0	7.0		7.0	0.0	0.0	45.5	45.5
NW Millstream	135	1999	8	30									0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW Millstream	135	2000	9	8	5.6				2.0				9.3	0.0	0.0		9.3	117.2	0.0	0.0	117.2
NW Millstream	135	2001	9	11	5.4	9.0			1.8	9.4			8.0	5.3	0.0		13.3	96.8	82.1	0.0	178.8
NW Millstream	135	2002	9	6	5.2	9.0	15.3		1.6	8.5	40.7		6.1	11.8	4.3		22.3	72.9	187.7	34.8	295.4
NW Millstream	135	2003	8	28		7.9	11.9			5.5	18.1		0.0	6.4	4.7		11.1	0.0	96.7	31.6	128.4
NW Millstream	135	2004	8	24	5.7	9.5	12.7		2.2	10.7	25.0		2.4	1.6	26.9		30.9	31.0	27.1	506.4	564.5
NW Millstream	157	1970	8	26				9.5				9.8	0.0			13.4	13.4	0.0			207.9
NW Millstream	157	1972	8	2				11.2				16.1	0.0			3.0	3.0	0.0			49.8
NW Millstream	157	1973	8	21	4.9			11.8	1.3			18.7	2.7			3.4	6.1	32.0			88.9
NW Millstream	157	1974	7	25	4.8			8.8	1.2			7.8	0.0			11.2	11.2	0.4			168.5
NW Millstream	157	1975	7	8	5.0			10.0	1.4			11.2	0.4			23.7	24.1	4.4			377.9
NW Millstream	157	1976	9	2	5.7			9.5	2.1			9.8	0.5			16.1	16.6	6.3			254.8
NW Millstream	157	1977	9	11	4.2			10.3	0.9			12.2	0.2			15.2	15.4	1.8			244.4
NW Millstream	157	1978	8	23	5.3			10.7	1.7			13.9	2.2			10.8	13.1	27.5			203.2
NW Millstream	157	1979	7	10	4.5			9.8	1.0			10.7	0.2			9.5	9.6	1.7			149.9
NW Millstream	157	1980	8	29	6.4			12.1	3.0			19.8	0.2			5.1	5.3	3.1			89.0
NW Millstream	157	1981	7	23	5.0			12.0	1.4			19.5	0.6			5.0	5.5	6.9			90.8
NW Millstream	157	1983	8	24	6.3			11.0	2.8			14.9	1.2			25.9	27.1	16.2			438.9
NW Millstream	158	1970	8	26									0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW Millstream	158	1972	8	1									0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW Millstream	158	1973	8	3									0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW Millstream	158	1974	7	15				8.5				7.0	0.0			3.7	3.7	0.0			54.7
NW Millstream	158	1975	8	8				12.8				23.7	0.0			0.7	0.7	0.0			11.6
NW Millstream	158	1977	7	27	4.5			9.2	1.0			8.7	0.4			7.2	7.6	5.0			114.4
NW Millstream	159	1970	8	25									0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW Millstream	159	1972	8	1									0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW Millstream	159	1973	8	3									0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW Millstream	159	1974	7	15									0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Appendix 2. (cont'd). Atlantic salmon mean length (cm), mean weight (g), Percent Habitat Saturation (PHS), and biomass (g per 100 m²) by site and year sampled for 1970-2004.

River	Site	Year	Month	Day	Average Fork Length (cm)				Average Whole Weight (g)				Percent Habitat Saturation					Biomass (g per 100 m²)			
					Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	All Parr	Total	Age 0	Age 1	Age 2+	Total
NW Millstream	159	1975	8	8									0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW Millstream	159	1976	8	26				10.7				13.9	0.0			3.7	3.7	0.0			60.4
NW Millstream	159	1977	7	26	4.3			9.4	0.9			9.5	0.5			5.5	6.0	6.1			90.2
NW Millstream	159	1978	8	24	5.3			10.0	1.7			11.2	0.8			7.7	8.5	9.9			131.2
NW Millstream	159	1979	7	11				10.4				12.6	0.0			8.5	8.5	0.0			136.4
NW Millstream	159	1980	8	27				11.4				16.8	0.0			4.2	4.2	0.0			69.8
NW Millstream	159	1981	7	24	4.2			9.6	0.8			10.0	3.0			40.0	43.1	33.8			655.2
NW Millstream	159	1982	9	13	5.8			9.3	2.2			9.0	0.8			4.6	5.4	10.2			79.9
NW Millstream	159	1983	8	30	5.4			10.0	1.8			11.3	2.9			8.6	11.5	36.0			171.4
NW Millstream	159	1997	9	16									0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW Millstream	160	1975	9	11				10.3				12.4	0.0			0.5	0.5	0.0			8.7
NW Millstream	160	1976	7	28				8.9				8.0	0.0			0.2	0.2	0.0			2.9
NW Millstream	160	1977	8	9	4.5			9.8	1.1			10.6	0.7			10.0	10.7	7.9			164.8
NW Millstream	160	1978	8	24	5.2			9.9	1.6			10.8	5.1			11.9	17.0	61.7			249.1
NW Millstream	160	1979	7	11				8.8				7.8	0.0			8.3	8.3	0.0			124.0
NW Millstream	160	1980	8	25				12.9				24.0	0.0			5.7	5.7	0.0			98.7
NW Millstream	160	1981	7	22				10.0				11.3	0.0			1.9	1.9	0.0			29.8
NW Millstream	160	1982	9	6	5.9			9.6	2.3			9.9	6.8			18.1	24.9	86.7			367.2
NW Millstream	160	1983	8	30	5.7			9.8	2.1			10.7	9.7			12.8	22.5	122.5			322.3
NW Millstream	161	1976	7	29									0.0			0.0	0.0	0.0			0.0
NW Millstream	161	1977	8	11	4.3			9.6	0.9			10.0	0.0			0.8	0.8	0.2			11.9
NW Millstream	161	1978	8	31	5.7			10.6	2.1			13.5	1.8			2.5	4.2	22.2			62.0
NW Millstream	161	1979	7	12				11.7				18.0	0.0			1.1	1.1	0.0			18.0
NW Millstream	161	1982	9	13	6.0			10.5	2.5			13.1	1.6			1.6	3.1	20.4			45.4
NW Millstream	161	1983	8	25	5.6			9.4	2.0			9.5	3.0			2.6	5.7	38.3			78.5
NW Millstream	162	1976	9	9	7.3			11.7	4.4			18.1	0.1			2.9	3.0	1.3			50.1
NW Millstream	162	1977	9	8	5.8			10.0	2.2			11.3	0.1			4.6	4.7	0.7			73.7
NW Millstream	163	1976	8	30									0.0			0.0	0.0	0.0			0.0
NW Millstream	163	1977	8	8	5.0			10.1	1.4			11.6	1.5			7.1	8.6	17.7			130.2
NW Millstream	163	1978	9	11	6.1			10.2	2.6			12.0	2.2			4.2	6.3	28.2			94.6
NW Millstream	163	1982	9	16	6.3			10.8	2.8			14.3	0.9			0.5	1.4	12.0			20.5
NW Millstream	163	1983	8	26				11.4				16.8	0.0			4.6	4.6	0.0			75.6
NW Miramichi	18	1972	9	21	5.8	10.8	15.3	11.3	2.2	14.3	40.5	16.3	0.9	0.7	1.1		2.7	11.5	11.2	21.3	44.1
NW Miramichi	18	1973	9	11	5.4		12.8	12.8	1.8		23.7	23.7	4.0	0.0	0.7		4.7	49.5	0.0	12.9	43.9
NW Miramichi	18	1974	7	10	3.2	8.2	12.3	8.5	0.4	6.2	21.1	6.9	0.1	1.4	0.3		1.8	1.4	19.7	5.6	26.7
NW Miramichi	18	1975	6	24	3.1	8.1		8.1	0.3	5.9		5.9	0.1	0.4	0.0		0.5	1.2	5.8	0.0	7.1
NW Miramichi	18	1976	6	22	2.5	7.9	11.5	8.6	0.2	5.5	17.2	7.3	0.6	2.1	1.5		4.2	4.9	30.7	25.2	60.8
NW Miramichi	18	1977	7	15	3.3	8.6	12.3	9.0	0.4	7.2	20.8	8.3	1.7	3.1	1.0		5.8	16.7	45.5	17.5	79.7
NW Miramichi	18	1978	8	25	4.6	8.6	11.4	8.9	1.1	7.1	17.0	8.1	5.9	8.1	2.5		16.6	68.7	120.7	42.2	231.7
NW Miramichi	18	1982	10	7	5.3	8.3	11.7	8.7	1.7	6.4	18.0	7.4	1.5	3.7	1.2		6.4	18.5	54.1	20.2	92.8
NW Miramichi	18	1983	10	11	5.2	9.1	11.9	9.8	1.6	8.5	18.9	10.8	5.9	4.0	3.0		12.9	71.5	60.6	50.4	182.5
NW Miramichi	18	1984	7	4	3.3	7.9	10.3	8.4	0.4	5.6	12.4	6.7	0.0	0.5	0.3		0.8	0.1	7.9	4.3	12.4
NW Miramichi	18	1993	8	26	4.9	9.1		9.1	1.3	8.4		8.5	9.3	12.4	0.0		21.8	108.8	179.8	0.0	288.6
NW Miramichi	18	1994	7	22	4.8	7.7			1.1	5.1		5.1	6.0	3.2	0.0		9.1	58.0	40.3	0.0	98.3
NW Miramichi	19	1974	9	23	4.6	8.8	11.5	9.3	1.1	7.7	17.1	9.0	0.2	5.7	2.4		8.3	1.8	85.2	40.4	127.5
NW Miramichi	19	1975	6	23	4.8				1.2				0.1	0.0	0.0		0.1	0.7	0.0	0.0	0.7
NW Miramichi	19	1976	6	23		8.0	10.5	9.0		5.6	13.1	8.1	0.0	1.9	4.2		6.1	0.0	26.9	67.9	94.8
NW Miramichi	19	1977	7	8	3.2	9.0	13.1	9.9	0.4	8.3	25.6	11.0	0.3	3.9	3.1		7.2	2.7	58.6	54.3	115.6

Appendix 2. (cont'd). Atlantic salmon mean length (cm), mean weight (g), Percent Habitat Saturation (PHS), and biomass (g per 100 m²) by site and year sampled for 1970-2004.

River	Site	Year	Month	Day	Average Fork Length (cm)				Average Whole Weight (g)				Percent Habitat Saturation					Biomass (g per 100 m²)			
					Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	All Parr	Total	Age 0	Age 1	Age 2+	Total
NW Miramichi	19	1978	9	5	5.6	9.8		9.8	1.9	10.6		10.6	0.8	1.3	0.0		2.1	10.1	20.1	0.0	30.2
NW Miramichi	19	1982	10	7	5.8	9.4	11.8	9.6	2.2	9.3	18.6	9.9	2.1	3.5	1.1		6.7	27.1	53.9	17.9	98.9
NW Miramichi	19	1983	9	27	5.1	9.6	11.5	10.2	1.5	10.1	17.1	12.2	5.4	2.1	1.7		9.1	64.8	32.6	27.5	125.0
NW Miramichi	19	1984	7	9		7.7	10.3	7.9		5.1	12.4	5.5	0.0	2.7	0.4		3.2	0.0	39.0	6.7	45.7
NW Miramichi	20	1971	6	24	3.7	7.3	10.4	10.0	0.6	4.4	12.6	11.3	0.5	0.1	1.9		2.4	5.0	1.5	29.6	36.2
NW Miramichi	20	1973	9	1	6.9	10.3	12.7	11.7	3.8	12.4	23.0	17.9	2.4	1.1	2.5		6.0	32.9	17.2	42.7	92.8
NW Miramichi	20	1993	8	26	5.4	8.9	10.6	9.8	1.8	8.0	13.5	10.6	3.4	2.7	4.2		10.3	38.5	56.1	27.3	121.9
NW Miramichi	20	1994	8	10	5.3	8.3	11.5	9.1	1.6	6.6	17.2	8.4	6.9	13.8	11.3		32.1	81.3	242.5	84.2	408.0
NW Miramichi	20	1995	9	14	5.1	8.6	11.4	9.6	1.5	7.2	16.7	10.0	8.2	12.0	13.8		33.9	95.9	230.5	101.5	427.9
NW Miramichi	20	1996	9	3	4.8	8.4	11.3	9.2	1.2	6.6	16.2	8.9	9.9	15.6	13.1		38.5	114.5	280.0	97.6	492.1
NW Miramichi	20	1997	8	26	4.9	7.9	10.6	9.0	1.4	5.6	13.5	8.1	6.6	7.5	10.3		24.3	75.3	142.2	72.7	290.1
NW Miramichi	20	1998	8	6	4.3	7.5	12.4		0.9	4.8	21.6		6.3	6.8	4.2		17.4	70.0	100.8	31.1	201.8
NW Miramichi	20	1999	9	16	5.4	8.0	10.3		1.8	5.7	12.4		21.5	18.3	37.8		77.6	138.7	140.4	78.8	358.0
NW Miramichi	20	2000	8	15	4.6	8.1	11.2		1.1	6.3	16.4		12.1	11.4	13.2		36.7	153.5	218.6	99.5	471.6
NW Miramichi	20	2001	8	14	4.9	8.2	10.8		1.6	6.4	15.0		11.0	13.8	9.8		34.7	154.9	245.9	74.5	475.2
NW Miramichi	20	2002	8	26	4.5	8.4	11.4		1.0	6.7	16.8		8.3	8.7	14.6		31.6	95.8	179.0	106.5	54.1
NW Miramichi	20	2003	8	25	5.1	7.7	10.8		1.4	5.2	14.3		5.9	13.5	10.7		30.0	63.2	231.2	77.1	371.5
NW Miramichi	20	2004	8	25	5.0	8.9	10.9		1.4	8.3	14.4		11.1	7.6	11.0		29.7	131.0	119.5	177.5	428.0
NW Miramichi	21	1974	9	8	5.3	9.5	11.1	10.6	1.7	9.5	15.3	13.5	1.7	3.4	0.6		5.7	21.4	52.1	9.8	83.3
NW Miramichi	21	1975	6	26	4.1	7.7	11.6	8.1	0.7	5.2	17.8	6.0	0.0	6.3	1.1		7.5	0.5	90.2	18.8	109.4
NW Miramichi	21	1976	6	24		6.3	9.5	9.0		2.8	9.5	8.3	0.0	1.1	1.1		2.2	0.0	14.0	16.9	0.0
NW Miramichi	21	1977	7	13	3.2	7.2	10.8	8.4	0.4	4.3	14.1	6.7	0.7	5.1	6.1		11.9	7.2	71.2	98.9	177.3
NW Miramichi	21	1978	8	18	4.0	7.8	11.6	8.3	0.7	5.4	17.7	6.5	0.9	8.3	3.1		12.3	9.7	119.3	51.0	180.1
NW Miramichi	21	1982	9	16	5.3	8.1	10.1	8.6	1.7	5.9	11.5	7.2	0.2	1.1	0.4		1.8	2.8	16.7	6.5	25.9
NW Miramichi	21	1983	9	12	5.5	8.3	10.7	8.8	1.9	6.5	13.9	7.8	3.9	8.3	5.4		17.6	49.2	122.1	87.2	258.5
NW Miramichi	21	1984	7	16	3.4	7.6	10.7	8.5	0.4	5.0	13.8	6.9	0.2	4.6	4.3		9.1	1.9	64.7	70.4	137.1
NW Miramichi	22	1973	8	26	5.7	10.0	13.5	11.7	2.1	11.2	27.6	18.2	13.4	0.8	1.7		16.0	170.3	12.5	30.8	213.6
NW Miramichi	22	1974	9	6	5.4	8.8	12.8	9.2	1.8	7.8	23.7	8.9	2.8	12.0	0.9		15.6	34.7	179.6	15.6	229.9
NW Miramichi	22	1975	6	25	2.3	8.7	10.8	8.9	0.1	7.6	14.1	8.1	0.0	3.8	3.6		7.3	0.0	56.6	57.8	114.5
NW Miramichi	22	1976	6	25		7.2	8.7	8.2		4.2	7.5	6.3	0.0	9.2	1.7		10.9	0.0	127.5	25.1	152.5
NW Miramichi	22	1977	7	12	3.3	7.9	11.3	9.4	0.4	5.5	16.2	9.3	0.5	2.7	5.5		8.6	4.5	38.3	90.8	133.7
NW Miramichi	22	1978	9	7	4.2	8.3	10.2	8.6	0.8	6.6	12.1	7.2	5.0	7.0	2.1		14.1	58.2	102.2	33.6	192.0
NW Miramichi	22	1982	9	23	5.3	8.1	12.4	8.8	1.7	6.1	21.6	7.2	2.3	4.2	1.6		8.0	28.0	60.6	26.8	115.4
NW Miramichi	22	1983	9	9	4.9	9.0	11.1	9.2	1.3	8.3	15.5	8.7	2.8	10.3	1.5		14.6	33.0	156.7	24.0	213.7
NW Miramichi	22	1984	7	16		7.5	10.9	8.3		4.8	14.7	6.5	0.0	3.8	3.1		6.9	0.0	53.4	50.8	103.9
NW Miramichi	22	1993	8	26	5.3	8.4	11.9	10.2	1.7	6.7	19.1	12.0	2.4	4.0	10.0		16.4	26.6	88.1	70.9	183.6
NW Miramichi	22	1994	8	10	5.2	8.5	11.3	10.3	1.6	7.0	16.5	12.2	11.2	4.7	15.7		31.6	133.6	125.9	112.7	372.2
NW Miramichi	23	1970	9	2																	
NW Miramichi	23	1971	8	25	6.0	10.2	12.3	11.3	2.5	12.1	21.2	16.1	1.9	5.2	7.9		14.9	24.2	82.4	134.8	241.4
NW Miramichi	23	1972	9	1	5.4	9.9	11.9	10.9	1.8	11.1	19.1	14.6	2.4	4.3	5.0		11.7	29.8	67.1	84.6	181.4
NW Miramichi	23	1973	8	17	3.6	9.6	12.4	10.4	0.5	10.0	21.4	12.7	1.6	4.0	3.0		8.7	17.1	62.2	51.7	130.9
NW Miramichi	23	1974	9	16	5.0	8.5	13.2	9.6	1.4	6.9	26.0	10.0	10.1	13.4	5.3		28.7	120.9	197.7	93.0	411.5
NW Miramichi	23	1975	7	3	5.8	8.0	11.3	8.9	2.2	5.8	16.4	8.0	0.1	21.1	17.6		38.8	1.0	304.4	291.5	596.9
NW Miramichi	23	1976	7	9	3.8	7.7	11.1	9.0	0.6	5.3	15.6	8.2	0.0	15.9	23.3		39.3	0.3	227.3	384.2	611.8
NW Miramichi	23	1977	7	25	4.4	8.1	11.1	9.4	0.9	6.0	15.4	9.4	3.9	10.4	18.2		32.4	43.9	150.6	298.6	493.2
NW Miramichi	23	1978	8	31	5.5	9.3	11.8	9.9	1.9	9.0	18.5	11.0	3.8	30.0	18.9		52.7	46.9	459.4	318.1	824.4
NW Miramichi	23	1982	9	23	5.6	8.8	12.4	9.7	2.0	7.7	21.8	10.3	2.4	15.3	12.6		30.3	30.4	229.2	216.9	476.5
NW Miramichi	23	1983	10	7	5.6	9.2	12.1	10.6	2.0	8.7	20.2	13.6	7.8	10.7	22.3		40.8	97.5	162.9	379.4	639.8

Appendix 2. (cont'd). Atlantic salmon mean length (cm), mean weight (g), Percent Habitat Saturation (PHS), and biomass (g per 100 m²) by site and year sampled for 1970-2004.

					Average Fork Length (cm)				Average Whole Weight (g)				Percent Habitat Saturation					Biomass (g per 100 m²)			
River	Site	Year	Month	Day	Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	All Parr	Total	Age 0	Age 1	Age 2+	Total
NW Miramichi	23	1984	8	8	4.8	8.7	12.4	9.1	1.3	7.5	21.4	8.4	2.4	16.2	4.0		22.6	28.3	241.5	68.9	338.8
NW Miramichi	23	1985	7	2	4.8	9.3	12.0	10.3	1.2	9.0	19.5	12.5	0.1	13.1	18.0		31.2	1.0	201.3	305.1	507.4
NW Miramichi	23	1993	8	27	5.2	8.4	10.2	8.5	1.6	6.6	12.0	6.9	23.6	13.3	2.5		39.3	293.5	202.7	17.3	513.5
NW Miramichi	23	1994	7	13	4.5	7.7	11.2	8.2	1.1	5.3	13.3	6.4	14.5	22.4	10.1		47.0	169.4	373.6	63.9	606.9
NW Miramichi	23	1997	8	27	5.2	8.8	11.0	9.6	1.6	7.8	15.2	9.9	8.2	19.4	17.4		44.9	96.2	379.4	129.6	605.1
NW Miramichi	23	1998	8	10	4.9	8.6	12.3		1.3	7.3	21.1		17.9	13.1	36.1		67.1	216.5	319.0	281.0	816.5
NW Miramichi	23	1999	8	29	5.0	8.2	10.9		1.4	6.3	14.7		7.3	6.1	12.7		26.1	208.4	490.3	333.5	1032.2
NW Miramichi	23	2000	9	13	6.4	9.5	11.8		3.0	10.1	22.7		6.8	4.7	22.3		33.7	84.9	179.5	196.1	460.5
NW Miramichi	23	2001	9	14	5.9	9.1	11.8		2.4	10.5	24.2		9.0	19.8	38.3		67.1	118.8	595.1	387.0	1100.8
NW Miramichi	23	2002	9	6	5.2	9.8	13.2		1.6	11.0	26.8		18.0	25.0	33.5		76.5	229.8	548.6	274.1	1052.5
NW Miramichi	23	2003	9	9	5.5	9.4	13.4		2.0	10.2	29.2		8.4	18.5	9.5		36.4	108.2	342.0	78.9	529.2
NW Miramichi	23	2004	8	18	5.8	10.3	12.6		2.3	12.6	24.2		6.1	43.5	29.9		79.4	81.7	700.7	548.0	1330.4
NW Miramichi	24	1975	9	16	5.4	8.8		8.8	1.7	7.8		7.8	2.5	2.2	0.0		4.7	30.6	33.1	0.0	63.7
NW Miramichi	24	1976	8	26	5.2	9.3		9.3	1.6	9.1		9.1	6.9	0.4	0.0		7.3	84.0	6.8	0.0	90.8
NW Miramichi	24	1977	8	19	5.3	8.3		8.3	1.6	6.5		6.5	3.3	0.2	0.0		3.5	40.0	2.7	0.0	42.7
NW Miramichi	24	1978	8	11	5.1		9.7	9.7	1.5		10.2	10.2	0.8	0.0	1.1		1.9	10.0	0.0	16.5	8.9
NW Miramichi	24	1982	10	21	6.2	8.8		8.8	2.7	7.7		7.7	2.2	0.7	0.0		2.9	28.0	10.7	0.0	38.7
NW Miramichi	24	1983	10	3	5.3	9.5		9.5	1.7	9.6		9.6	3.2	0.8	0.0		4.0	39.5	12.4	0.0	51.9
NW Miramichi	24	1984	8	2	4.4	9.6		9.6	1.0	9.9		9.9	0.8	1.4	0.0		2.3	9.3	22.5	0.0	31.7
NW Miramichi	24	1993	9	10	5.0	8.9	10.0	9.1	1.4	8.0	11.3	8.5	9.0	9.8	2.6		21.4	105.3	155.9	17.8	278.9
NW Miramichi	24	1994	7	18	4.2	8.2		8.2	0.8	5.9		5.9	7.7	3.6	0.0		11.3	83.1	44.0	0.0	127.0
NW Miramichi	24	1997	8	27	4.3				0.9				4.6	0.0	0.0		4.6	50.5	0.0	0.0	50.5
NW Miramichi	25	1974	8	9	4.9				1.3				0.6	0.0	0.0		0.6	6.7	0.0	0.0	6.7
NW Miramichi	26	1974	8	17	4.7	10.4		10.4	1.2	12.8		12.8	1.3	2.0	0.0		3.3	15.2	31.9	0.0	47.1
NW Miramichi	26	1975	7	2									0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW Miramichi	26	1976	6	30	3.1	8.3	11.3	8.6	0.3	6.5	16.3	7.3	0.4	1.0	0.3		1.7	4.3	14.6	4.6	23.6
NW Miramichi	26	1977	7	18	4.3	9.6		9.6	0.9	9.9		9.9	0.0	0.4	0.0		0.5	0.3	6.9	0.0	7.2
NW Miramichi	26	1978	6	28	2.7				0.2				0.1	0.0	0.0		0.1	0.7	0.0	0.0	0.7
NW Miramichi	26	1979	7	3	3.3	6.8		6.8	0.4	3.6		3.6	0.0	0.1	0.0		0.1	0.4	1.2	0.0	1.6
NW Miramichi	26	1980	7	2	4.1	7.8	9.5	9.2	0.8	5.4	9.6	8.9	0.5	0.1	1.3		1.9	5.9	1.8	19.4	27.1
NW Miramichi	26	1981	6	29	2.6				0.2				0.4	0.0	0.0		0.4	3.4	0.0	0.0	3.4
NW Miramichi	26	1982	7	5	3.8	7.0	8.8	8.8	0.6	3.8	7.7	7.7	0.0	0.3	0.6		0.9	0.2	4.2	8.4	12.8
NW Miramichi	26	1983	7	8	3.9		9.6	9.6	0.7		9.9	9.9	1.4	0.0	1.6		3.0	15.6	0.0	24.1	13.9
NW Miramichi	26	1984	7	19	3.8	9.0		9.0	0.6	8.2		8.2	0.1	0.7	0.0		0.8	1.5	9.8	0.0	11.3
NW Miramichi	26	1985	9	9	5.3	9.4		8.4	1.7	9.3		6.6	5.0	2.0	0.0		7.0	61.5	30.0	0.0	91.5
NW Miramichi	26	1986	8	22	4.5	7.9		7.9	1.1	5.6		6.2	1.6	3.8	0.0		5.3	18.2	54.1	0.0	72.3
NW Miramichi	26	1993	8	20	5.7	9.0		9.0	2.1	8.2		8.2	2.2	13.4	0.0		15.6	24.8	193.8	0.0	218.6
NW Miramichi	26	1994	7	27	4.3	7.8	9.9	8.2	0.9	5.4	11.0	6.1	1.0	5.5	2.1		8.6	10.1	82.2	13.6	105.9
NW Miramichi	26	1997	8	26	4.9	8.1		8.1	1.4	6.0		6.0	5.0	4.2	0.0		9.1	56.4	54.2	0.0	110.6
NW Miramichi	26	1998	8	21	4.7	8.0			1.1	5.7			1.1	4.1	0.0		5.2	11.8	52.8	0.0	64.5
NW Miramichi	26	1999	8	26	4.8	8.3			1.3	6.4			14.8	10.4	0.0		25.2	78.0	135.4		213.4
NW Miramichi	26	2000	9	5	5.4	8.8			1.9	8.5			9.7	5.9	0.0		15.5	127.2	89.3	0.0	216.4
NW Miramichi	26	2001	9	7	5.5	8.3			1.8	6.9			3.7	8.7	0.0		12.4	42.0	129.7	0.0	171.8
NW Miramichi	26	2002	9	3	4.8	9.2			1.1	7.9			2.6	2.7	0.0		5.4	26.9	32.1	0.0	59.0
NW Miramichi	26	2003	8	29	5.2	8.2	10.5		1.8	6.5	12.2		5.0	5.9	3.7		14.6	66.7	99.5	23.4	189.6
NW Miramichi	26	2004	8	17	5.0	8.5	10.5		1.4	6.4	12.2		6.6	5.9	7.3		19.9	75.0	75.7	111.1	261.8
NW Miramichi	27	1974	8	17	4.4	9.4		9.4	0.9	9.3		9.3	0.5	2.1	0.0		2.6	5.7	33.0	0.0	38.7
NW Miramichi	27	1975	7	4		7.3	11.8	9.6		4.4	18.6	9.9	0.0	0.1	0.5		0.6	0.0	1.9	7.9	9.8

Appendix 2. (cont'd). Atlantic salmon mean length (cm), mean weight (g), Percent Habitat Saturation (PHS), and biomass (g per 100 m²) by site and year sampled for 1970-2004.

					Average Fork Length (cm)				Average Whole Weight (g)				Percent Habitat Saturation					Biomass (g per 100 m²)			
River	Site	Year	Month	Day	Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	All Parr	Total	Age 0	Age 1	Age 2+	Total
NW Miramichi	27	1976	7	9	2.9		11.8	11.8	0.3		18.6	18.6	0.2	0.0	0.5		0.6	1.5	0.0	8.0	1.4
NW Miramichi	27	1977	8	23	4.6	8.6		8.6	1.1	7.3		7.3	1.3	0.5	0.0		1.8	14.7	7.8	0.0	22.5
NW Miramichi	27	1978	7	7	3.3	6.7		6.7	0.4	3.5		3.5	0.8	0.7	0.0		1.5	8.0	9.6	0.0	17.6
NW Miramichi	27	1982	10	6	5.6	9.8		9.8	2.0	10.6		10.6	1.1	0.2	0.0		1.3	13.2	3.1	0.0	16.4
NW Miramichi	27	1983	10	4	5.0	9.6		9.6	1.4	10.0		10.0	5.3	1.8	0.0		7.1	64.0	27.8	0.0	91.8
NW Miramichi	27	1984	7	20	3.6	6.9		6.9	0.5	3.7		3.7	0.9	0.5	0.0		1.4	9.4	6.8	0.0	16.2
NW Miramichi	27	1993	8	26	4.3	8.6		8.6	0.9	7.2		7.2	1.7	5.2	0.0		6.8	17.2	69.3	0.0	86.5
NW Miramichi	27	1994	8	11	4.4	7.6		7.6	0.9	4.9		4.9	1.6	8.5	0.0		10.1	17.0	115.0	0.0	132.1
NW Miramichi	28	1974	8	10	4.6	9.4	14.8	10.5	1.1	9.5	36.7	13.1	0.1	0.4	0.3		0.9	1.1	6.6	6.4	14.1
NW Miramichi	28	1975	8	13	5.9	7.8	12.6	9.0	2.3	5.4	22.4	8.3	0.0	1.5	1.1		2.7	0.6	22.0	18.8	41.4
NW Miramichi	28	1976	8	23	5.1	8.5	12.3	10.4	1.5	6.9	21.1	12.7	0.4	0.2	0.5		1.0	4.8	2.5	7.8	15.2
NW Miramichi	28	1977	8	31	5.5	9.5	13.8	9.7	1.9	9.7	29.7	10.5	0.9	3.1	0.5		4.5	11.3	47.5	8.8	67.6
NW Miramichi	28	1978	7	20	3.3	9.0		9.0	0.4	8.3		8.3	0.1	0.9	0.0		1.0	0.7	14.1	0.0	14.8
NW Miramichi	28	1979	7	22	4.9	8.1	10.6	8.4	1.3	5.9	13.3	6.8	0.2	1.0	0.4		1.6	2.5	15.1	5.9	23.5
NW Miramichi	28	1981	9	1	5.0	9.3	11.6	9.6	1.4	9.0	17.4	10.1	0.6	0.7	0.3		1.6	7.4	11.3	4.4	23.1
NW Miramichi	28	1982	8	23	4.6	7.9	13.3	8.0	1.1	5.6	26.6	5.9	0.3	4.7	0.4		5.4	3.6	67.4	6.5	77.5
NW Miramichi	28	1983	8	16	5.3	8.4	12.3	8.9	1.7	6.6	21.1	7.9	1.9	1.6	0.6		4.1	23.2	23.9	10.8	57.9
NW Miramichi	28	1984	8	3	4.1	8.0	10.2	9.2	0.8	5.7	11.9	8.9	0.2	0.2	0.5		0.9	1.9	3.0	8.2	13.1
NW Miramichi	28	1993	8	26	5.1	7.7	9.5	8.6	1.5	5.2	9.7	7.2	6.6	2.3	4.0		12.8	76.0	46.2	25.1	147.3
NW Miramichi	28	1994	7	22	4.1	8.3		8.3	0.7	5.9		5.9	3.2	1.9	0.0		5.2	30.1	22.0	0.0	52.1
NW Miramichi	29	1974	8	27	5.4	9.9	11.3	10.2	1.8	11.1	16.3	12.2	1.2	1.5	0.6		3.2	14.4	23.2	9.7	47.3
NW Miramichi	29	1975	8	14	4.7	8.5	12.5	8.9	1.2	6.9	22.1	8.0	2.2	5.7	1.8		9.7	25.3	84.2	31.3	140.7
NW Miramichi	29	1976	8	5	4.4	8.8	12.0	8.4	1.0	7.7	19.6	6.7	0.6	3.4	1.5		5.5	7.1	50.9	25.8	83.7
NW Miramichi	29	1977	7	21	3.9	8.3	12.1	8.7	0.7	6.4	19.8	7.4	0.1	1.9	0.6		2.7	1.3	28.2	10.9	40.5
NW Miramichi	29	1978	7	12	2.6	9.1	11.5	9.7	0.2	8.5	17.2	10.4	0.0	3.6	2.2		5.8	0.4	54.9	36.0	91.3
NW Miramichi	29	1982	10	13	5.2	8.9	11.1	9.4	1.6	8.0	15.6	9.3	0.2	5.7	2.3		8.2	2.1	85.7	38.3	126.1
NW Miramichi	29	1983	10	12	5.7	8.6	11.6	9.3	2.1	7.3	17.5	9.0	2.1	4.4	2.7		9.2	26.1	65.8	44.7	136.6
NW Miramichi	29	1984	8	13	5.2	7.6		7.6	1.6	5.0		5.0	0.6	1.9	0.0		2.5	6.7	27.5	0.0	34.2
NW Miramichi	30	1974	8	17		9.3		9.3		9.1		9.1	0.0	0.2	0.0		0.2	0.0	2.4	0.0	2.4
NW Miramichi	30	1975	8	14	4.4	8.7	10.3	8.9	1.0	7.4	12.4	8.0	0.1	2.6	0.6		3.3	1.2	38.7	10.2	50.1
NW Miramichi	30	1976	8	5	4.4	8.5	12.3	9.6	0.9	6.9	20.9	9.9	0.7	6.1	8.9		15.7	8.4	90.0	151.5	249.9
NW Miramichi	30	1977	7	21	3.8	8.9	11.8	9.4	0.6	8.0	18.6	9.5	0.1	1.2	0.5		1.8	1.3	17.6	9.1	28.1
NW Miramichi	30	1978	7	12	3.6	7.1	10.1	8.2	0.5	4.1	11.6	6.3	0.2	2.5	3.0		5.8	2.3	35.1	47.3	84.8
NW Miramichi	30	1982	10	13	5.1	8.7	11.7	9.4	1.5	7.4	18.0	9.3	0.4	6.0	3.8		10.1	4.3	89.7	62.9	157.0
NW Miramichi	30	1983	10	12	5.7	8.7	11.2	9.3	2.1	7.4	15.9	9.1	1.7	3.5	2.2		7.3	21.4	51.5	35.6	108.6
NW Miramichi	30	1984	8	13	4.6	8.7	10.8	9.1	1.1	7.5	14.3	8.6	0.2	1.7	0.8		2.6	1.8	25.8	12.3	39.9
NW Miramichi	30	1993	8	25	5.2	8.6	10.0	9.3	1.6	7.1	11.1	9.1	7.5	3.9	5.8		17.3	87.9	84.2	38.5	210.6
NW Miramichi	30	1994	8	11	4.6	8.4	13.3	9.1	1.1	6.8	26.3	8.5	4.0	17.4	9.0		30.4	44.0	279.5	71.3	394.7
NW Miramichi	30	1995	9	15	4.7	8.9	12.0	9.5	1.2	8.0	19.6	9.8	8.9	6.0	3.3		18.3	103.2	95.5	22.9	221.6
NW Miramichi	30	1997	8	26	4.9	8.4	11.4	8.7	1.3	6.6	16.8	7.4	7.9	8.8	2.5		19.2	91.7	131.8	17.6	241.1
NW Miramichi	30	1998	8	10	4.4	7.7	10.5		0.9	5.1	13.0		4.7	13.6	6.5		24.8	51.9	216.5	47.1	315.5
NW Miramichi	30	1999	8	20	4.6	7.2	10.0		1.1	4.3	11.3		15.2	12.5	10.9		38.6	148.4	107.1	16.8	272.4
NW Miramichi	30	2000	8	30	5.2	8.5	11.3		1.7	7.1	16.5		15.4	13.8	16.5		45.6	198.5	277.5	122.2	598.2
NW Miramichi	30	2001	9	7	5.3	8.7	10.4		1.6	7.1	12.0		11.3	20.6	14.3		46.2	132.8	377.7	97.6	608.1
NW Miramichi	30	2002	9	3	4.8	8.3	12.8		1.3	6.5	23.4		14.2	12.4	4.5		31.1	177.7	190.6	33.9	402.2
NW Miramichi	30	2003	8	25	4.9	7.8	11.4		1.2	5.1	15.9		6.5	14.4	2.8		23.7	69.7	207.9	19.7	297.2
NW Miramichi	30	2004	8	17	4.9	8.7	11.3		1.3	7.1	16.1		12.9	9.4	11.2		33.5	156.2	136.3	185.1	477.6
NW Miramichi	31	1974	8	29	5.2	9.5	13.3	9.8	1.8	9.7	26.6	10.6	3.2	10.6	0.5		14.3	39.4	163.3	8.8	211.5

Appendix 2. (cont'd). Atlantic salmon mean length (cm), mean weight (g), Percent Habitat Saturation (PHS), and biomass (g per 100 m²) by site and year sampled for 1970-2004.

					Average Fork Length (cm)				Average Whole Weight (g)				Percent Habitat Saturation					Biomass (g per 100 m²)			
River	Site	Year	Month	Day	Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	All Parr	Total	Age 0	Age 1	Age 2+	Total
NW Miramichi	31	1975	8	13	4.6	7.8	11.0	8.3	1.1	5.4	15.1	6.4	2.8	6.8	2.4		11.9	31.8	96.9	39.0	167.7
NW Miramichi	31	1976	8	4	4.1	7.6	10.2	8.0	0.7	4.9	12.0	5.8	2.3	9.8	3.4		15.5	25.4	138.7	53.5	217.6
NW Miramichi	31	1977	8	8	4.3	7.5	10.6	8.0	0.9	4.8	13.4	5.7	3.5	10.6	3.8		17.9	38.9	150.1	61.8	250.8
NW Miramichi	31	1978	7	31	3.2	7.1	9.5	8.1	0.4	4.1	9.6	6.0	0.9	2.8	5.9		9.6	9.1	38.8	90.3	138.1
NW Miramichi	31	1979	7	25	5.0	7.2	9.7	8.3	1.4	4.3	10.4	6.6	0.2	2.8	4.8		7.8	2.7	38.3	75.6	116.5
NW Miramichi	31	1980	7	28	4.5	7.6	10.2	9.1	1.0	4.9	11.9	8.4	0.5	0.9	2.8		4.3	6.0	13.3	44.7	64.0
NW Miramichi	31	1981	9	11	4.9	8.1	11.4	8.8	1.3	6.0	16.6	7.6	14.2	12.7	6.9		33.7	168.1	184.2	114.3	466.5
NW Miramichi	31	1982	9	1	4.4	7.3	11.6	7.8	0.9	4.5	17.6	5.3	5.6	15.9	6.1		27.6	63.7	221.6	102.3	387.7
NW Miramichi	31	1983	7	28	4.4	7.8	10.4	8.2	0.9	5.3	12.7	6.2	2.5	11.5	4.5		18.6	28.9	164.5	72.6	266.0
NW Miramichi	31	1984	7	18	3.7	7.1	9.6	7.4	0.5	4.0	10.1	4.6	2.0	2.1	0.7		4.8	20.9	29.1	11.6	61.6
NW Miramichi	31	1993	8	12	4.7	8.1	11.0	8.9	1.2	6.1	15.0	8.0	6.9	14.3	12.9		34.1	80.6	207.4	211.6	499.6
NW Miramichi	31	1994	8	11	5.2	8.0	10.7	9.1	1.6	5.8	13.8	8.4	6.1	10.2	14.5		30.8	71.0	200.7	105.1	376.9
NW Miramichi	31	1997	8	27	4.6	7.3	10.7	7.9	1.1	4.4	14.0	5.5	15.5	12.2	6.2		33.8	182.2	188.1	45.3	415.6
NW Miramichi	31	1998	8	6	4.4	7.7	10.0		1.0	5.2	11.2		8.3	19.9	6.3		34.5	94.2	318.0	45.2	457.4
NW Miramichi	31	1999	8	20	4.9	7.6	10.0		1.3	4.9	11.4		13.2	20.3	16.6		50.1	225.2	243.2	78.9	547.3
NW Miramichi	31	2000	8	15	4.4	7.3	9.7		1.1	4.3	10.3		8.5	12.6	10.6		31.7	110.6	219.5	75.3	405.4
NW Miramichi	31	2001	8	16	4.6	7.4	10.6		1.2	5.0	13.1		12.3	25.2	11.8		49.3	152.4	441.6	85.3	679.3
NW Miramichi	31	2002	9	5	4.9	7.8	10.3		1.3	5.2	11.1		4.3	6.8	12.6		23.6	49.5	138.8	79.3	267.6
NW Miramichi	31	2003	8	26	5.0	7.8	10.2		1.4	5.3	11.5		9.9	16.9	3.0		29.8	115.9	257.3	20.7	393.9
NW Miramichi	31	2004	8	25	5.0	8.3	11.1		1.4	6.8	15.1		10.3	22.4	28.5		61.3	128.4	337.7	454.0	920.1
NW Miramichi	32	1974	8	25	4.7	9.1	13.3	9.9	1.2	8.4	26.4	11.0	1.5	10.4	6.3		18.2	17.4	158.4	110.2	286.0
NW Miramichi	32	1993	8	25	5.1	7.8	10.8	9.0	1.5	5.3	14.3	8.2	7.9	10.7	10.6		29.3	92.6	187.7	77.4	357.6
NW Miramichi	32	1994	8	11	4.7	8.0	10.8	8.5	1.2	5.7	14.2	6.9	8.1	16.0	8.0		32.2	93.0	262.6	59.1	414.7
NW Miramichi	32	1995	9	14	5.3	7.9	10.9	8.9	1.7	5.5	14.7	7.9	6.4	5.6	6.6		18.6	74.6	98.3	46.0	218.8
NW Miramichi	33	1974	8	22	4.8	8.9	12.4	9.2	1.2	7.9	21.6	8.8	1.4	15.2	1.7		18.3	16.4	228.9	29.5	274.8
NW Miramichi	33	1975	8	28	4.6	7.9	11.1	9.0	1.1	5.6	15.6	8.1	2.4	11.1	11.9		25.4	28.0	159.4	195.4	382.8
NW Miramichi	33	1976	9	9	5.5	7.4	10.3	8.3	1.9	4.5	12.5	6.4	5.5	14.9	10.2		30.6	67.9	208.4	163.2	439.5
NW Miramichi	33	1977	8	23	4.5	7.7	11.2	8.8	1.0	5.2	15.9	7.6	1.9	17.3	18.8		38.0	22.2	247.2	309.1	578.6
NW Miramichi	33	1978	8	16	5.2	7.9	10.9	9.0	1.6	5.5	14.5	8.1	0.2	5.1	8.2		13.5	2.2	73.0	133.8	209.0
NW Miramichi	33	1979	7	24	4.3	8.1	12.3	8.3	0.9	6.1	21.1	6.5	0.2	5.5	0.6		6.2	1.8	79.6	10.0	91.4
NW Miramichi	33	1981	9	10	5.4	8.4	11.4	9.3	1.8	6.7	16.8	9.0	3.7	24.0	21.3		49.0	45.5	353.3	354.1	752.9
NW Miramichi	33	1982	8	25	4.4	7.4	11.4	8.0	1.0	4.6	16.6	5.9	0.2	17.8	10.6		28.6	2.0	249.7	175.8	427.5
NW Miramichi	33	1983	7	20	3.2	7.5	10.9	7.9	0.4	4.7	14.6	5.5	1.2	27.9	12.3		41.4	11.9	391.4	201.3	604.6
NW Miramichi	33	1984	8	22	4.6	8.1	10.5	8.6	1.1	5.9	13.1	7.1	8.5	17.2	16.4		42.0	98.4	249.2	263.2	610.8
NW Miramichi	33	1985	9	12	4.6	7.8	11.5	8.2	1.1	5.4	17.3	6.3	4.9	25.8	8.7		39.4	56.4	369.3	145.5	571.2
NW Miramichi	33	1994	8	2	3.9	7.3	10.7	7.9	0.7	4.3	13.8	5.6	4.1	15.7	10.1		30.0	43.4	254.3	75.2	373.0
NW Miramichi	33	1996	8	28	4.5	7.7	11.0	8.6	1.0	5.2	15.1	7.2	5.5	19.8	2.0		27.3	61.5	293.5	15.0	370.0
NW Miramichi	33	1997	8	28	4.2	7.0	9.8	7.9	0.8	3.9	10.7	5.6	10.3	21.3	25.1		56.8	116.2	400.6	186.4	703.3
NW Miramichi	33	1998	8	10	4.2	7.5			0.8	4.7			4.4	12.6	0.0		16.9	47.2	174.8	0.0	222.0
NW Miramichi	33	1999	8	18	4.5	7.1	10.3		1.0	4.1	12.5		12.3	11.2	33.2		56.6	118.0	306.2	134.0	558.2
NW Miramichi	33	2000	8	23	4.4	7.5	10.7		1.0	5.1	14.4		11.0	17.7	14.5		43.2	140.2	322.9	111.8	574.9
NW Miramichi	33	2001	8	15	4.2	6.6	10.8		0.9	3.6	13.0		7.5	15.7	7.8		31.0	92.5	255.3	53.1	401.0
NW Miramichi	33	2002	9	5	4.8	7.5	10.3		1.2	4.5	11.5		5.4	12.9	4.8		23.2	61.0	187.6	31.6	280.1
NW Miramichi	33	2003	8	29	4.3	7.4	10.1		1.0	4.6	11.5		5.7	18.9	19.7		44.3	68.8	357.1	143.3	569.2
NW Miramichi	33	2004	8	25	4.8	7.3	10.0		1.3	4.3	11.2		5.5	19.7	34.5		59.6	65.1	272.0	545.3	882.4
NW Miramichi	34	1974	8	19	4.5	7.5	12.6	8.6	1.0	4.8	22.8	7.2	1.0	11.5	0.6		13.1	11.0	162.0	10.6	183.6
NW Miramichi	34	1975	9	8	4.9	7.8	11.4	9.2	1.3	5.4	16.6	8.7	3.4	12.0	15.2		30.6	40.4	171.7	251.7	463.9
NW Miramichi	34	1977	9	1	3.4	7.1	10.2	8.1	0.4	4.1	12.0	6.0	0.9	12.0	14.0		26.9	9.1	165.6	222.3	397.0

Appendix 2. (cont'd). Atlantic salmon mean length (cm), mean weight (g), Percent Habitat Saturation (PHS), and biomass (g per 100 m²) by site and year sampled for 1970-2004.

					Average Fork Length (cm)				Average Whole Weight (g)				Percent Habitat Saturation					Biomass (g per 100 m²)			
River	Site	Year	Month	Day	Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	All Parr	Total	Age 0	Age 1	Age 2+	Total
NW Miramichi	34	1978	7	31	3.3	6.3	9.6	7.0	0.4	2.9	10.0	3.8	0.4	10.8	9.4		20.6	4.0	142.0	146.0	3.6
NW Miramichi	34	1979	7	4	2.7	6.7	9.5	7.7	0.2	3.4	9.7	5.2	0.0	4.3	5.8		10.1	0.3	57.5	90.0	147.9
NW Miramichi	34	1980	8	26	5.4	7.9	10.0	8.3	1.8	5.6	11.5	6.4	1.4	7.9	3.1		12.3	17.1	113.0	48.3	178.3
NW Miramichi	34	1981	8	27	4.2	7.8	10.3	8.4	0.8	5.3	12.5	6.8	3.0	13.3	9.8		26.2	34.0	190.4	157.3	381.7
NW Miramichi	34	1982	8	19	4.1	6.9	10.9	7.2	0.8	3.7	14.7	4.2	2.3	9.3	3.1		14.7	25.4	126.5	50.6	202.6
NW Miramichi	34	1983	7	27	3.3	7.1	10.6	7.8	0.4	4.1	13.5	5.3	4.3	26.5	17.1		47.8	43.0	365.8	275.6	684.4
NW Miramichi	34	1984	7	25	3.3	7.2	11.0	7.7	0.4	4.3	15.0	5.2	1.4	8.0	3.5		12.9	13.8	111.0	58.0	182.8
NW Miramichi	34	1985	9	6	4.1	7.0	11.1	7.5	0.8	4.0	15.6	4.8	2.9	4.5	1.7		9.1	32.0	61.9	27.9	121.7
NW Miramichi	34	1993	8	17	4.1	7.0		7.0	0.8	3.9		3.9	16.7	3.6	0.0		20.3	183.9	49.6	0.0	233.5
NW Miramichi	34	1994	8	2	3.8	7.2		7.2	0.6	4.2		4.2	7.2	3.4	0.0		10.7	77.6	42.9	0.0	120.5
NW Miramichi	34	1995	9	14	4.5	6.8	10.4	7.5	1.0	3.6	12.9	4.8	8.5	13.5	9.7		31.7	96.1	213.1	71.7	380.9
NW Miramichi	34	1996	8	28	4.3	7.1	10.3	7.7	0.9	4.0	12.4	5.1	12.3	17.9	19.6		49.8	140.1	319.9	146.3	606.2
NW Miramichi	34	1997	9	19	5.2	7.7	10.7	9.2	1.6	5.1	14.1	8.7	10.8	18.8	26.1		55.8	129.4	370.3	197.4	697.1
NW Miramichi	34	1998	8	5	3.8	7.1	10.9		0.6	4.0	14.7		7.0	8.2	4.2		19.3	74.4	120.4	29.9	224.6
NW Miramichi	34	1999	8	30	4.9	7.6	10.5		1.4	4.9	13.2		33.3	21.0	38.7		93.0	189.9	314.2	260.3	764.3
NW Miramichi	34	2000	8	22	4.6	8.2	11.0		1.1	6.6	16.0		17.1	23.7	29.2		70.1	212.7	515.8	233.6	962.1
NW Miramichi	34	2001	8	13	4.3	7.3	10.9		0.8	4.5	15.1		7.2	19.7	21.4		48.4	78.5	361.4	167.0	606.9
NW Miramichi	34	2003	9	2	4.4	7.3	10.6		1.0	4.4	12.6		9.2	12.3	16.7		38.2	110.7	226.0	115.7	452.4
NW Miramichi	35	1974	8	19	4.7	8.9	13.8	9.1	1.2	7.9	29.7	8.4	12.5	16.8	1.8		31.2	147.3	253.3	32.1	432.6
NW Miramichi	35	1975	9	10	5.6	8.7	12.1	9.7	2.0	7.4	19.8	10.4	1.4	9.2	9.3		20.0	18.1	138.0	158.0	314.1
NW Miramichi	35	1976	7	28	3.9	7.5	11.8	8.2	0.6	4.8	18.6	6.3	0.9	1.5	1.1		3.5	10.2	21.3	18.2	49.7
NW Miramichi	35	1977	7	26	3.5	7.6	11.1	7.8	0.5	4.9	15.3	5.4	0.5	8.0	1.8		10.2	5.0	113.0	29.0	146.9
NW Miramichi	35	1978	7	27	3.4	6.6	10.3	7.0	0.4	3.2	12.4	3.9	0.9	3.4	1.9		6.2	9.2	45.4	30.4	85.0
NW Miramichi	35	1982	10	18	5.0	8.3	12.4	8.8	1.4	6.4	21.5	7.8	4.7	13.3	5.1		23.1	56.3	194.9	87.2	338.4
NW Miramichi	35	1983	9	28	5.0	8.0	12.4	8.3	1.4	5.7	21.6	6.4	18.3	68.3	15.6		102.2	218.5	985.5	268.5	1472.4
NW Miramichi	35	1984	8	16	4.9	7.8	11.1	8.5	1.3	5.4	15.5	6.9	3.0	7.5	3.3		13.8	35.5	107.2	54.6	197.3
NW Miramichi	35	1986	8	21	5.5	8.6	11.0	9.1	1.9	7.3	15.0	8.5	34.5	45.8	21.7		101.9	430.4	681.5	355.0	1466.8
NW Miramichi	35	1994	8	2	4.0	8.0	11.0	8.8	0.7	5.7	15.0	7.8	12.3	19.3	17.9		49.5	138.1	351.7	134.7	624.5
NW Miramichi	35	1996	8	28	4.6	8.3	11.6	8.9	1.1	6.4	17.7	8.0	15.5	20.7	0.0		36.2	181.9	304.9	0.0	486.8
NW Miramichi	35	1997	9	19	5.2	8.1	11.6	9.5	1.6	6.0	17.8	9.7	27.9	25.9	35.2		88.9	349.7	516.0	276.2	1142.0
NW Miramichi	35	1998	8	5	4.0	7.5	10.5		0.7	4.7	13.1		6.8	11.7	7.2		25.6	73.3	187.9	51.6	312.8
NW Miramichi	35	1999	8	18	4.7	7.8	10.8		1.2	5.4	14.4		11.6	13.5	14.8		39.9	360.5	503.5	321.6	1185.7
NW Miramichi	35	2000	8	22	4.7	8.7	10.6		1.2	8.2	16.7		28.9	22.4	14.3		65.6	389.6	461.9	129.2	980.7
NW Miramichi	35	2001	8	13	4.5	7.6	10.5		1.1	5.2	14.0		11.5	22.1	11.3		44.9	141.9	385.8	89.2	616.9
NW Miramichi	35	2002	9	5	5.1	8.3	11.1		1.7	6.6	15.0		14.5	20.2	17.2		52.0	196.7	383.1	125.8	705.6
NW Miramichi	35	2003	9	2	4.9	8.0	11.2		1.4	5.8	16.9		4.5	32.7	21.2		58.4	53.7	582.3	171.8	807.9
NW Miramichi	35	2004	8	25	5.1	8.4	11.5		1.5	6.8	18.3		22.3	16.6	52.0		91.0	273.7	251.4	922.1	1447.2
NW Miramichi	36	1974	8	19	4.4	8.5	13.3	8.8	1.0	6.9	26.4	7.8	4.3	24.2	5.4		34.0	49.5	357.9	96.0	503.3
NW Miramichi	36	1975	8	26	4.5	8.0	11.6	8.7	1.0	5.7	17.7	7.5	8.7	12.7	13.7		35.1	99.5	183.6	228.5	511.6
NW Miramichi	36	1976	7	28	3.3	7.1	11.0	7.7	0.4	4.0	14.9	5.2	2.7	17.1	11.2		31.0	27.3	235.3	183.3	445.9
NW Miramichi	36	1977	7	19	3.9	6.5	10.0	7.4	0.7	3.1	11.4	4.6	2.7	12.7	8.6		24.0	28.9	169.1	136.6	25.8
NW Miramichi	36	1978	7	27	2.6	7.7	10.1	8.4	0.2	5.1	11.8	6.7	0.2	11.5	10.2		21.9	2.1	163.7	161.4	327.3
NW Miramichi	36	1979	7	12	2.3	6.0	9.9	7.0	0.1	2.5	10.8	3.9	0.1	5.9	8.0		14.0	0.7	75.5	126.0	0.7
NW Miramichi	36	1980	7	17	2.6	7.1	10.2	7.5	0.2	4.0	11.8	4.8	0.2	11.9	5.5		17.6	1.6	164.1	87.4	253.2
NW Miramichi	36	1981	8	27	3.8	7.6	11.0	8.2	0.6	5.0	15.0	6.2	4.8	24.4	12.8		42.0	52.0	345.8	209.0	606.8
NW Miramichi	36	1982	8	19	3.9	6.9	10.6	7.5	0.7	3.6	13.5	4.8	1.4	9.9	6.6		17.8	15.1	134.1	106.2	255.4
NW Miramichi	36	1983	7	27	3.4	7.2	10.7	7.7	0.4	4.2	14.0	5.1	2.1	20.1	9.6		31.8	21.4	277.8	155.4	454.6
NW Miramichi	36	1984	8	22	3.8	7.3	10.4	7.8	0.6	4.4	12.6	5.3	6.8	19.2	7.5		33.5	72.9	267.9	120.7	461.5

Appendix 2. (cont'd). Atlantic salmon mean length (cm), mean weight (g), Percent Habitat Saturation (PHS), and biomass (g per 100 m²) by site and year sampled for 1970-2004.

					Average Fork Length (cm)				Average Whole Weight (g)				Percent Habitat Saturation					Biomass (g per 100 m²)			
River	Site	Year	Month	Day	Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	All Parr	Total	Age 0	Age 1	Age 2+	Total
NW Miramichi	36	1985	9	5	4.5	7.6	11.5	8.1	1.0	4.9	17.1	6.1	12.8	21.3	10.7		44.8	147.2	301.4	177.8	626.4
NW Miramichi	36	1986	8	19	4.6	7.8	10.5	8.5	1.1	5.3	13.2	6.9	13.9	22.4	15.7		52.0	161.0	320.0	252.6	733.5
NW Miramichi	40	1970	8	21	5.4	10.0	11.7	10.1	1.8	11.3	18.1	11.6	2.5	6.9	9.4		18.8	30.8	108.3	158.3	297.4
NW Miramichi	40	1971	7	15	4.1	8.9	12.4	9.6	0.8	8.0	21.3	10.0	1.1	5.1	3.0		9.2	12.4	76.6	51.2	140.3
NW Miramichi	40	1972	9	13	6.5	9.8	12.5	10.2	3.1	10.6	22.1	12.0	0.6	4.8	1.6		7.1	8.6	75.7	28.0	112.3
NW Miramichi	40	1973	8	22	5.2	9.7	12.6	10.8	1.5	10.2	22.8	14.1	3.1	3.8	4.6		11.6	38.2	59.1	79.6	176.9
NW Miramichi	40	1974	7	16	4.3	8.0	11.8	8.4	0.9	5.7	18.6	6.7	0.0	2.7	0.9		3.7	0.5	39.2	16.0	55.6
NW Miramichi	40	1975	7	18	3.6	8.2	10.6	9.1	0.5	6.3	13.5	8.7	3.0	1.5	1.8		6.2	30.8	21.8	29.1	81.7
NW Miramichi	40	1976	8	4	4.4	7.9	12.1	8.3	0.9	5.5	19.8	6.5	1.2	2.0	1.2		4.4	13.6	29.3	19.8	62.7
NW Miramichi	40	1977	8	5	4.6	8.7	11.8	9.9	1.1	7.5	18.8	11.0	4.9	3.2	4.4		12.5	56.5	48.2	74.5	179.2
NW Miramichi	40	1978	7	6	3.3	8.3	10.6	9.1	0.4	6.5	13.3	8.4	0.7	1.4	1.3		3.3	6.7	19.9	20.4	47.0
NW Miramichi	40	1979	7	9	3.5	7.6	11.3	8.1	0.5	5.0	16.3	5.9	0.4	2.2	0.8		3.4	4.4	30.8	13.7	48.9
NW Miramichi	40	1980	7	3	3.3	7.6	10.9	8.7	0.4	5.0	14.5	7.6	0.3	1.8	2.4		4.4	2.6	25.3	38.7	66.6
NW Miramichi	40	1981	7	3	2.6	7.7	11.3	8.5	0.2	5.1	16.3	6.9	0.4	1.1	0.9		2.3	3.3	15.2	14.7	33.3
NW Miramichi	40	1982	7	16	3.7	7.3	11.8	7.5	0.6	4.3	18.6	4.7	0.4	2.7	0.4		3.4	4.2	37.1	6.1	47.4
NW Miramichi	40	1983	7	14	4.0	8.1	11.2	9.5	0.7	6.1	15.7	9.6	1.7	3.7	6.6		11.9	18.3	53.2	108.6	180.1
NW Miramichi	40	1984	7	5	3.5	8.1		8.1	0.5	6.0		5.9	0.2	7.5	0.0		7.7	1.9	108.6	0.0	110.5
NW Miramichi	40	1985	7	22		9.3	12.1	11.1		9.1	19.8	15.6	0.0	0.2	0.9		1.1	0.0	3.4	14.9	18.3
NW Miramichi	40	1986	7	8		8.8	12.3	9.5		7.7	21.1	9.7	0.0	1.6	0.9		2.5	0.0	23.8	16.3	40.0
NW Miramichi	40	1987	7	17	5.1	8.7	11.3	9.8	1.5	7.5	16.1	10.6	0.4	3.8	5.5		9.7	4.5	56.5	91.7	152.7
NW Miramichi	40	1988	7	6	3.6	9.2	11.6	9.7	0.5	8.7	17.8	10.4	2.7	2.0	1.1		5.8	27.9	30.4	18.7	77.0
NW Miramichi	40	1989	6	30	3.3	8.0	12.5	8.4	0.4	5.8	21.9	6.8	2.4	8.5	2.3		13.1	23.9	122.8	38.8	185.5
NW Miramichi	40	1990	7	6	3.8	7.6	11.4	8.7	0.6	5.0	16.6	7.4	0.2	7.3	7.8		15.3	1.6	103.7	129.5	234.9
NW Miramichi	40	1991	8	5	4.9	8.3	10.8	9.7	1.3	6.4	14.2	10.3	2.7	6.4	16.7		25.8	32.0	94.1	270.6	396.7
NW Miramichi	40	1992	7	9	3.5	8.4	11.6	9.4	0.5	6.7	17.4	9.3	2.9	3.8	3.9		10.5	29.6	55.2	64.3	149.2
NW Miramichi	40	1993	7	14	3.6	8.2	11.5	8.5	0.5	6.1	17.2	6.9	3.0	16.9	5.8		25.7	31.8	246.4	96.3	374.5
NW Miramichi	40	1994	7	20	4.3	7.9	11.7	9.0	0.8	4.8	16.1	7.2	5.3	12.5	14.5		32.2	53.1	158.5	214.5	426.2
NW Miramichi	40	1995	9	12	4.9	8.2	10.7	9.0	1.4	6.2	14.0	8.3	2.9	11.6	11.3		25.7	34.5	169.2	182.6	386.3
NW Miramichi	40	1996	8	30	5.2	8.5	12.0	9.5	1.6	7.0	19.5	9.8	5.8	6.3	2.8		14.9	71.0	93.0	47.2	211.3
NW Miramichi	40	1997	8	28	5.3	8.3	11.7	8.9	1.7	6.5	18.3	8.1	1.9	9.5	5.2		16.6	23.6	139.4	87.2	250.1
NW Miramichi	40	1998	8	7	4.4	8.0	11.1		0.9	5.8	15.3		4.0	4.6	7.8		16.4	45.3	65.8	128.1	239.3
NW Miramichi	40	1999	8	25	4.3	7.8	10.8		0.9	5.3	14.2		5.6	10.5	8.4		24.6	63.7	149.9	137.1	350.8
NW Miramichi	40	2000	9	1	4.6	8.6	11.5		1.1	7.1	17.4		19.3	2.8	7.5		29.6	228.5	40.7	127.2	396.4
NW Miramichi	40	2001	8	13	4.5	7.9	11.4		1.0	5.6	16.9		0.0	17.4	6.0		23.4	0.5	250.4	99.1	350.0
NW Miramichi	40	2002	8	28	4.8	9.2	11.4		1.2	7.9	15.2		10.5	3.2	18.2		32.0	124.0	44.6	277.4	445.9
NW Miramichi	40	2003	9	3	4.8	8.9	13.2		1.3	7.8	27.4		6.2	14.0	8.0		28.3	76.3	209.0	147.6	432.9
NW Miramichi	40	2004	8	27	5.2	8.3	11.6		1.6	6.4	16.3		3.5	6.9	9.0		19.4	44.1	100.1	140.5	283.7
NW Miramichi	41	1970	8	20	5.6	8.4	11.3	10.1	1.9	6.6	16.2	11.7	0.1	1.5	5.1		6.7	1.2	22.3	84.7	108.2
NW Miramichi	41	1971	6	29	3.4	8.6	10.9	9.9	0.5	7.1	14.8	11.0	0.5	0.7	1.7		2.8	4.7	10.0	27.9	42.7
NW Miramichi	41	1972	9	11	6.3	9.5	11.2	9.6	2.8	9.5	15.8	9.9	0.2	1.2	0.8		2.2	3.3	18.7	12.4	34.3
NW Miramichi	41	1973	8	17	5.1	10.3	11.8	11.1	1.5	12.4	18.6	15.3	0.6	0.2	0.3		1.2	7.8	3.8	5.8	17.4
NW Miramichi	41	1974	7	29	5.0	8.7		8.7	1.4	7.3		7.5	0.1	1.2	0.0		1.3	1.3	17.4	0.0	18.7
NW Miramichi	41	1975	7	14	3.6	9.3	11.3	9.7	0.5	9.1	16.3	10.2	1.5	0.9	0.9		3.2	15.5	13.1	14.1	42.8
NW Miramichi	41	1976	7	6	3.6	7.3	11.8	7.7	0.5	4.5	18.6	5.1	0.1	1.1	0.3		1.6	1.5	15.4	5.3	22.2
NW Miramichi	41	1977	7	25	4.4	8.2	12.0	9.9	1.0	6.1	19.4	11.0	1.9	0.8	2.0		4.7	21.2	12.3	33.4	66.9
NW Miramichi	41	1978	7	6	3.3	6.8	11.3	7.1	0.4	3.6	16.3	4.0	0.6	1.2	0.3		2.1	6.3	16.8	4.5	27.6
NW Miramichi	41	1980	7	7	4.2	7.8	10.4	8.5	0.8	5.3	12.7	7.0	1.1	1.2	1.1		3.4	12.6	17.4	17.5	47.5
NW Miramichi	41	1981	7	1	2.5	7.4	10.1	7.5	0.2	4.6	11.5	4.8	0.3	1.8	0.5		2.5	2.5	25.0	7.3	34.8

Appendix 2. (cont'd). Atlantic salmon mean length (cm), mean weight (g), Percent Habitat Saturation (PHS), and biomass (g per 100 m²) by site and year sampled for 1970-2004.

					Average Fork Length (cm)				Average Whole Weight (g)				Percent Habitat Saturation					Biomass (g per 100 m²)			
River	Site	Year	Month	Day	Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	All Parr	Total	Age 0	Age 1	Age 2+	Total
NW Miramichi	41	1982	8	31	4.8	7.6	11.3	8.2	1.2	5.0	16.3	6.3	1.3	3.3	1.5		6.1	15.5	46.5	25.2	87.1
NW Miramichi	41	1983	7	19	4.5	8.4	10.4	9.3	1.0	6.6	12.8	9.0	0.2	1.6	2.4		4.2	2.7	24.2	37.7	64.7
NW Miramichi	41	1984	8	17	4.4	8.3	10.6	9.0	1.0	6.5	13.3	8.3	0.6	1.0	1.8		3.4	7.0	14.0	28.7	49.7
NW Miramichi	41	1985	7	3		9.6	11.8	10.2		10.1	18.6	11.9	0.0	0.9	0.5		1.4	0.0	14.3	8.7	23.0
NW Miramichi	41	1993	8	20	5.1	8.1	11.3	8.8	1.5	6.1	16.1	7.7	2.9	9.9	5.8		18.5	31.6	158.6	41.6	231.8
NW Miramichi	41	1994	7	20	4.4	7.5		7.5	0.9	4.7		4.7	2.1	2.9	0.0		5.0	21.0	35.3	0.0	56.4
NW Miramichi	41	1996	8	27	5.2	8.7		8.7	1.6	7.4		7.4	5.4	4.4	0.0		9.8	62.6	57.7	0.0	120.3
NW Miramichi	41	1999	9	3	5.6	8.3	10.8		2.0	6.5	14.2		9.2	6.6	3.3		19.1	30.2	64.1	78.7	173.1
NW Miramichi	41	2000	9	13	5.5	8.4	11.1		1.9	7.0	16.3		6.4	2.6	5.4		14.4	77.3	57.0	38.2	172.4
NW Miramichi	42	1970	8	19	5.3	7.5	10.9	10.1	1.7	4.7	14.6	11.7	0.0	0.7	4.4		5.1	0.5	10.1	71.1	81.7
NW Miramichi	42	1971	6	30	3.6	8.8	11.8	10.1	0.5	7.6	18.6	11.7	0.0	1.7	3.0		4.8	0.5	25.3	50.8	76.6
NW Miramichi	42	1972	9	12	6.3	9.6	12.2	10.6	2.8	10.1	20.5	13.3	0.1	1.7	1.7		3.5	1.7	25.8	29.1	56.7
NW Miramichi	42	1973	9	7	5.3	7.8	11.6	10.3	1.6	5.4	17.4	12.4	1.9	0.1	0.6		2.6	22.7	1.5	9.9	34.1
NW Miramichi	42	1974	8	26	6.1	9.7	11.6	10.1	2.6	10.3	17.8	11.8	0.3	4.1	1.8		6.1	3.4	63.4	29.8	96.6
NW Miramichi	42	1975	8	25	5.4	8.8	11.8	9.8	1.8	7.7	18.6	10.6	3.9	1.6	1.7		7.2	48.1	23.7	28.6	100.4
NW Miramichi	42	1976	9	9	5.9	8.4	11.8	9.4	2.4	6.8	18.6	9.4	1.0	1.6	1.6		4.2	12.2	24.1	27.6	63.9
NW Miramichi	42	1977	8	18	4.7	8.8	11.7	9.4	1.2	7.7	18.0	9.5	3.3	3.5	2.1		8.8	38.3	52.2	34.8	125.3
NW Miramichi	42	1978	7	7	3.3	7.8	9.4	9.3	0.4	5.4	9.5	9.0	0.9	0.3	4.8		6.0	8.5	4.9	74.3	87.7
NW Miramichi	42	1993	8	19	4.5	8.0		8.0	1.0	5.8		5.6	9.1	10.0	0.0		19.1	103.4	139.0	0.0	242.4
NW Miramichi	109	1994	8	2	3.8	7.1	11.0	7.7	0.6	4.0	15.1	5.2	8.1	4.6	2.9		15.7	87.1	66.5	20.4	174.0
NW Miramichi	109	1996	8	28	4.1	7.1	9.4	7.7	0.8	4.0	9.5	5.2	18.3	9.6	7.9		35.9	210.2	161.4	55.0	426.7
NW Miramichi	109	1997	9	12	4.6	7.5	11.0	7.7	1.1	4.7	15.1	5.1	26.3	18.1	5.9		50.3	317.2	278.9	44.5	640.6
NW Miramichi	113	2004	8	18	5.2	8.4	10.8		1.6	6.5	14.2		9.6	8.5	11.0		29.0	120.2	123.1	177.9	421.2
NW Miramichi	115	1994	8	11	4.9	8.8	11.5	9.8	1.3	7.6	17.0	10.5	2.6	12.6	14.9		30.0	28.3	247.3	110.3	385.8
NW Miramichi	115	1995	9	14	5.4	9.1	10.5	9.3	1.8	8.4	13.1	9.0	27.1	12.3	3.0		42.4	342.9	196.6	20.9	560.4
NW Miramichi	115	1996	9	3	5.4	8.1	10.7	9.1	1.7	6.0	13.9	8.5	6.4	11.0	14.1		31.5	74.7	214.2	102.4	391.3
NW Miramichi	115	1997	9	15	5.1	8.2	10.8	8.8	1.5	6.2	14.1	7.8	3.5	6.1	4.1		13.8	39.2	99.2	28.5	166.8
NW Miramichi	115	1998	8	6	4.4	7.8	11.4		1.0	5.3	16.8		2.9	13.6	2.6		19.2	30.9	200.9	19.6	251.4
NW Miramichi	115	1999	9	8	5.2	7.4	10.0		1.6	4.5	11.4		7.2	14.6	3.4		25.2	102.7	201.8	42.8	347.3
NW Miramichi	115	2000	8	23	5.0	7.9	11.1		1.5	5.7	15.1		8.8	23.3	15.0		47.2	112.8	408.8	111.4	633.0
NW Miramichi	115	2001	8	14	4.8	8.0	10.9		1.2	5.9	13.2		8.0	16.8	9.9		34.7	93.9	287.4	66.3	447.6
NW Miramichi	115	2002	8	26	4.7	7.8	10.8		1.2	5.3	14.3		5.5	16.2	11.3		33.0	63.3	274.9	83.2	421.5
NW Miramichi	115	2003	8	25	4.8	8.1	11.3		1.2	6.1	15.2		5.9	15.5	12.7		34.1	69.0	278.8	89.0	436.8
NW Miramichi	115	2004	8	18	5.0	8.2	10.8		1.5	6.4	13.7		7.4	14.2	27.2		48.8	91.8	211.3	427.8	730.8
NW Miramichi	143	1994	8	2	4.0	7.4		7.4	0.7	4.5		4.5	2.8	4.9	0.0		7.7	29.3	62.9	0.0	92.2
NW Miramichi	153	1996	8	29	4.6	7.2	9.8	8.7	1.1	4.3	10.8	7.4	6.3	3.9	10.9		21.0	70.5	88.0	74.1	232.6
NW Miramichi	153	1997	8	25	4.1	7.7	10.9	8.4	0.8	5.2	14.7	6.8	11.8	13.5	10.0		35.3	132.2	225.8	73.8	431.8
Trout Bk	191	1998	9	3	6.3				2.8				3.4	0.0	0.0		3.4	40.2	0.0	0.0	40.2
Trout Bk	191	1999	8	30			10.6				13.5		0.0	0.0	21.8		21.8	0.0	0.0	152.6	311.7
Trout Bk	191	2000	9	8			14.5				33.6		0.0	0.0	15.4		15.4	0.0	0.0	108.2	247.7
Trout Bk	191	2001	9	14			11.1				15.7		0.0	0.0	4.5		4.5	0.0	0.0	28.1	65.5
Trout Bk	191	2002	8	26									0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Trout Bk	191	2003	8	28		8.4				6.6			0.0	3.3	0.0		3.3	0.0	41.5	0.0	41.5
Trout Bk	191	2004	9	8	6.3				2.9				2.3	0.0	0.0		2.3	30.8	0.0	0.0	30.8
NW Miramichi	201	1998	8	5	3.8	6.4	9.7		0.6	3.0	10.2		9.4	5.4	4.5		19.3	102.4	80.8	30.7	215.6
NW Miramichi	201	1999	8	30	5.0	7.5	10.3		1.4	4.8	12.3		9.3	20.7	8.8		38.7	250.6	433.8	221.5	905.9

Appendix 2. (cont'd). Atlantic salmon mean length (cm), mean weight (g), Percent Habitat Saturation (PHS), and biomass (g per 100 m²) by site and year sampled for 1970-2004.

					Average Fork Length (cm)				Average Whole Weight (g)				Percent Habitat Saturation					Biomass (g per 100 m²)			
River	Site	Year	Month	Day	Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	All Parr	Total	Age 0	Age 1	Age 2+	Total
NW Miramichi	201	2000	9	5	4.7	8.0	10.8		1.2	6.2	14.8		10.5	17.7	14.9		43.1	135.4	339.3	112.9	587.6
NW Miramichi	201	2001	9	7	4.4	7.1	10.5		1.1	4.4	12.7		13.1	15.1	18.0		46.2	166.2	291.4	128.9	586.5
NW Miramichi	201	2002	9	10	4.7	7.3	10.6		1.2	4.4	13.4		10.8	16.8	15.0		42.6	133.2	293.0	111.1	537.3
NW Miramichi	201	2004	8	25	4.6	7.8	10.6		1.1	5.5	13.7		13.0	17.2	8.5		38.8	153.6	253.6	141.3	548.4
NW Miramichi	215	1996	9	3	4.4	8.0	11.7	9.0	1.0	5.7	17.9	8.2	6.6	14.5	9.2		30.4	73.3	237.9	69.6	380.7
NW Miramichi	215	1997	8	27	4.6	7.7	9.2	8.2	1.1	5.2	8.8	6.2	5.0	5.8	4.6		15.5	56.2	101.4	30.5	188.0
NW Miramichi	215	1999	9	16	5.1	7.9	10.8		1.5	5.5	14.1		5.7	4.0	0.0		9.7	120.2	378.3	74.4	572.9
NW Miramichi	215	2000	8	22	5.3	8.4	11.1		1.9	7.0	15.9		13.0	17.5	8.9		39.3	185.8	307.1	67.8	560.8
NW Miramichi	215	2001	9	7	5.1	8.5	11.5		1.5	7.0	16.3		11.2	28.0	17.3		56.5	136.7	498.9	125.1	760.7
NW Miramichi	215	2002	9	10	4.7	8.3	11.3		1.3	6.3	17.0		10.6	12.8	6.3		29.8	137.3	204.3	48.5	390.1
NW Miramichi	215	2003	8	26	4.8	8.2	11.0		1.2	6.2	15.0		6.2	15.2	2.7		24.1	70.0	225.2	19.4	314.6
NW Miramichi	215	2004	8	17	5.0	8.7	12.6		1.5	7.2	19.7		10.4	31.3	15.6		57.3	127.3	446.5	232.2	806.1
NW Miramichi	216	1999	9	9	4.6	8.5			1.1	6.9			7.4	8.1	0.0		15.5	46.3	65.2	0.0	111.5
NW Miramichi	216	2000	9	15	5.8	8.8			2.2	8.0			10.0	3.6	0.0		13.6	123.5	49.1	0.0	172.6
NW Miramichi	216	2001	9	7	4.6	9.2			1.1	7.8			9.2	4.3	0.0		13.4	104.3	51.6	0.0	155.9
NW Miramichi	216	2002	9	5	4.6				1.0				5.2	0.0	0.0		5.2	51.5	0.0	0.0	51.5
NW Miramichi	216	2003	9	2	5.2	8.3			1.5	6.0			2.1	1.9	0.0		4.1	22.1	22.2	0.0	44.3
NW Miramichi	216	2004	8	17	5.3				1.8				7.7	0.0	0.0		7.7	101.3	0.0	0.0	101.3
Sevogle	37	1974	9	16	5.3	10.5		10.5	1.7	13.1		13.1	4.7	2.4	0.0		7.1	58.3	38.3	0.0	96.6
Sevogle	37	1975	8	25	4.5	8.4		8.4	1.0	6.6		6.6	4.4	1.6	0.0		6.0	50.6	23.7	0.0	74.3
Sevogle	37	1976	8	27	5.5	7.8	10.1	8.3	1.9	5.4	11.8	6.4	2.6	1.0	0.7		4.3	32.5	13.9	11.4	57.9
Sevogle	37	1977	8	22	5.1	9.6	11.9	10.7	1.5	9.9	19.2	14.0	6.7	0.8	1.5		9.0	81.2	12.6	24.5	118.4
Sevogle	37	1978	7	26	3.1	8.6		8.6	0.3	7.3		7.3	0.1	0.5	0.0		0.6	0.7	7.5	0.0	8.2
Sevogle	37	1979	9	26	5.8	9.1	12.8	10.3	2.2	8.4	23.7	12.4	1.4	0.4	0.5		2.3	17.8	6.0	8.6	32.4
Sevogle	37	1980	9	16	6.3				2.8				1.8	0.0	0.0		1.8	23.4	0.0	0.0	23.4
Sevogle	37	1981	8	28	5.1	7.8	12.3	10.1	1.5	5.4	21.1	11.5	2.0	0.1	0.4		2.6	24.2	2.0	7.7	33.8
Sevogle	37	1982	9	27	4.8	8.1		8.1	1.2	5.9		5.9	0.8	2.0	0.0		2.8	9.0	29.0	0.0	37.9
Sevogle	37	1983	7	21	4.2	8.4	10.8	8.7	0.8	6.6	14.3	7.4	2.7	4.0	1.3		8.0	30.3	59.5	20.3	110.1
Sevogle	37	1984	8	14	4.7	8.0	10.4	8.8	1.2	5.7	12.7	7.8	1.7	1.7	1.9		5.3	19.5	25.1	31.1	75.7
Sevogle	37	1993	8	25	5.0	8.4		8.4	1.4	6.8		6.7	4.6	6.4	0.0		11.0	52.5	86.6	0.0	139.1
Sevogle	37	1995	9	15	4.8	8.1	10.9	8.9	1.2	6.1	14.7	8.0	4.3	4.1	3.5		11.9	48.3	66.2	23.4	137.8
Sevogle	38	1974	9	6	5.1	8.1	11.9	8.6	1.5	6.0	19.0	7.2	5.5	21.0	7.4		33.8	65.9	304.7	124.9	495.5
Sevogle	38	1975	7	30	4.1	7.4	10.5	8.5	0.8	4.6	13.0	6.8	2.5	6.9	6.7		16.1	27.7	97.0	107.3	232.0
Sevogle	38	1976	7	19	3.4	7.0	9.7	7.7	0.4	3.8	10.3	5.2	0.3	7.3	6.0		13.7	3.6	99.4	94.1	197.1
Sevogle	38	1977	7	26	3.7	9.1	11.4	9.0	0.6	8.4	16.7	8.1	2.9	6.8	7.8		17.5	30.6	103.2	129.0	262.8
Sevogle	38	1978	8	2	2.8	8.2	11.1	8.6	0.2	6.1	15.7	7.1	0.7	26.6	9.6		37.0	6.8	387.6	158.3	552.8
Sevogle	38	1979	7	27	4.4	7.1	9.8	8.0	1.0	4.0	10.5	5.7	0.9	8.0	6.5		15.4	10.7	110.3	101.2	222.2
Sevogle	38	1980	7	18	2.9	7.7	10.1	8.4	0.3	5.1	11.8	6.6	0.2	3.8	3.1		7.1	2.0	53.7	49.0	104.7
Sevogle	38	1981	8	28	4.5	8.5	10.8	9.3	1.0	7.0	14.3	9.2	7.1	11.4	11.9		30.4	81.7	168.5	193.7	443.9
Sevogle	38	1982	8	20	3.9	6.9	12.4	8.0	0.7	3.8	21.5	5.8	0.4	5.5	6.3		12.2	4.8	74.5	108.0	187.3
Sevogle	38	1983	7	7	3.4	7.1	10.0	8.5	0.4	4.1	11.3	6.8	1.2	5.6	11.9		18.7	12.0	77.9	188.0	277.8
Sevogle	38	1984	7	18	3.7	7.1	10.3	7.7	0.6	4.1	12.5	5.2	1.4	10.2	6.2		17.7	15.0	140.4	98.3	253.7
Sevogle	38	1993	8	23	4.7	7.8	10.5	8.3	1.2	5.3	13.1	6.5	8.8	15.7	10.8		35.2	102.3	224.3	173.5	500.1
Sevogle	38	1994	7	22	4.1	8.1	11.5	8.7	0.7	6.1	17.2	7.5	8.4	13.4	7.1		28.9	92.4	216.7	52.6	361.8
Sevogle	38	1995	9	13	5.1	8.0	11.1	8.7	1.5	5.9	15.6	7.4	10.1	29.2	17.1		56.4	122.4	423.7	281.3	827.4
Sevogle	38	1996	8	28	4.9	8.0	11.5	9.0	1.3	5.9	17.2	8.2	7.7	12.5	4.5		24.7	88.8	191.7	33.5	314.0

Appendix 2. (cont'd). Atlantic salmon mean length (cm), mean weight (g), Percent Habitat Saturation (PHS), and biomass (g per 100 m²) by site and year sampled for 1970-2004.

					Average Fork Length (cm)				Average Whole Weight (g)				Percent Habitat Saturation					Biomass (g per 100 m²)			
River	Site	Year	Month	Day	Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	All Parr	Total	Age 0	Age 1	Age 2+	Total
Sevogle	38	1997	8	27	4.7	8.1	11.0	8.8	1.1	6.1	15.1	7.7	7.5	11.8	8.0		27.3	85.5	199.1	58.0	342.7
Sevogle	38	1998	9	3	5.0	7.6	11.0		1.4	5.0	15.1		7.1	16.7	9.0		32.8	85.1	236.8	147.5	469.5
Sevogle	38	1999	8	17	4.6	7.7	10.1		1.1	5.1	11.7		19.8	16.8	13.4		50.0	229.1	239.3	212.4	680.8
Sevogle	38	2000	8	31	5.0	7.8	10.6		1.5	5.8	15.4		18.3	19.3	17.8		55.4	232.1	292.5	324.7	849.3
Sevogle	38	2001	8	24	5.2	7.5	10.2		1.6	4.8	11.9		7.2	21.9	17.2		46.3	88.6	312.5	270.0	671.1
Sevogle	38	2002	8	27	5.0	8.0	10.6		1.5	5.6	13.0		9.5	15.2	18.1		42.8	124.4	215.2	284.1	623.7
Sevogle	38	2003	9	2	5.4	8.4	10.8		1.7	6.8	15.0		5.8	12.4	16.1		34.3	67.2	256.5	121.9	445.5
Sevogle	38	2004	9	1	5.7	8.9	11.7		2.1	8.7	18.4		13.9	8.1	30.7		52.7	178.0	131.7	518.5	828.2
Sevogle	39	1974	9	17	5.4	7.7	12.6	9.1	1.8	5.2	22.7	8.6	4.4	15.8	9.5		29.7	54.8	224.5	163.9	443.2
Sevogle	39	1975	8	15	4.6	7.6	10.8	9.2	1.1	4.9	14.3	8.8	4.1	4.6	9.7		18.3	46.7	64.9	157.4	269.1
Sevogle	39	1976	9	7	5.3	8.6	12.6	9.7	1.7	7.3	22.8	10.4	5.8	5.7	12.5		24.1	71.6	85.5	216.0	373.1
Sevogle	39	1977	8	3	4.4	7.9	11.6	8.4	0.9	5.6	17.4	6.7	2.1	6.1	4.3		12.5	23.3	88.3	71.5	183.1
Sevogle	39	1978	7	26	3.3	7.0	10.8	8.1	0.4	3.9	14.4	5.9	0.4	5.7	6.8		12.9	3.7	78.5	110.7	192.8
Sevogle	39	1979	9	27	5.8	7.6	11.7	9.4	2.1	5.0	18.3	9.3	4.4	3.1	4.7		12.2	55.6	43.6	79.0	178.2
Sevogle	39	1980	9	15	5.6	7.9	11.9	8.8	2.0	5.6	18.9	7.8	3.5	3.2	2.9		9.6	44.0	46.1	48.1	138.2
Sevogle	39	1981	8	24	4.0	8.2	11.0	9.1	0.7	6.3	15.2	8.7	5.2	3.7	4.0		13.0	57.5	54.3	65.8	177.5
Sevogle	39	1982	7	15	3.2	6.2	11.1	6.6	0.4	2.6	15.5	3.2	0.1	3.7	1.5		5.3	1.0	48.7	24.9	0.9
Sevogle	39	1983	7	12	3.2	7.0	10.3	8.0	0.4	3.9	12.3	5.9	1.1	7.9	9.9		18.9	11.1	108.8	157.7	277.6
Sevogle	39	1984	7	30	3.6	7.3	11.2	7.7	0.5	4.3	15.7	5.2	1.0	8.0	3.3		12.3	10.5	111.4	55.1	176.9
Sevogle	39	1993	8	19	4.2	8.1	10.3	8.6	0.8	5.9	12.4	7.2	8.2	5.5	3.5		17.1	90.5	88.1	23.2	201.8
Sevogle	39	1994	7	21	3.6	6.3		6.3	0.5	2.8		2.8	9.6	2.3	0.0		12.0	103.5	27.5	0.0	131.0
Sevogle	39	1996	8	29	4.2	8.2	11.2	8.3	0.9	6.1	15.9	6.4	8.6	20.5	0.0		29.1	95.9	300.8	0.0	396.7
Sevogle	39	1997	8	29	4.2	6.8	10.6	7.6	0.8	3.6	13.5	4.9	10.8	11.8	8.6		31.2	121.3	184.9	62.8	369.1
Sevogle	39	1998	8	5	3.8	7.0	13.3		0.6	3.9	26.3		3.6	8.8	46.7		59.1	37.4	45.4	89.4	172.1
Sevogle	39	1999	9	3	4.6	7.0	10.0		1.1	3.8	11.4		1.6	0.9	9.6		12.2	125.6	175.8	86.6	388.0
Sevogle	39	2000	9	12	4.4	7.8	10.7		1.1	5.2	15.3		10.7	14.6	12.4		37.7	142.5	254.1	100.5	497.1
Sevogle	39	2001	9	14	4.4	6.9	10.4		0.9	3.7	13.2		10.0	9.4	7.8		27.2	115.2	148.9	57.7	321.8
Sevogle	39	2002	9	4		7.8	11.2			5.3	15.8		0.0	19.4	9.2		28.6	0.0	312.8	68.2	380.9
Sevogle	39	2003	9	8		9.5	11.4			10.9	17.9		0.0	11.3	13.3		24.5	0.0	271.0	103.5	374.5
Sevogle	39	2004	8	26	4.7	10.2	11.9		1.1	11.5	18.8		16.8	10.7	16.1		43.6	190.9	163.7	266.9	621.6
Sevogle	103	1994	7	21	4.2	8.1	11.0	8.6	0.9	6.2	14.7	7.8	3.7	9.9	5.0		18.6	46.6	149.6	79.6	275.8
Sevogle	103	1995	8	23	4.5	8.0	10.9	8.8	1.0	5.9	14.7	7.7	14.9	10.3	8.1		33.3	172.0	149.1	131.8	452.9
Sevogle	103	1996	8	27	4.7	8.5	11.1	9.6	1.2	6.8	15.5	10.0	15.7	0.3	5.1		21.2	184.0	4.6	84.1	272.7
Sevogle	103	1997	8	27	4.8	8.3	11.5	8.9	1.2	6.5	17.3	8.0	6.5	6.8	3.7		17.0	76.8	99.6	62.1	238.5
Sevogle	103	1998	8	4	4.3	8.0	11.0		0.9	5.7	15.0		2.9	3.8	2.9		9.8	32.2	54.8	48.1	135.1
Sevogle	103	1999	8	27	5.0	7.9	11.1		1.4	5.6	15.4		7.8	14.3	9.6		31.7	93.3	206.3	157.1	456.7
Sevogle	103	2000	8	31	5.9	8.8	11.2		2.5	8.1	16.0		2.0	3.3	3.8		9.1	28.0	52.1	63.4	143.6
Sevogle	103	2001	8	20	4.4	7.8	10.5		1.0	5.4	12.0		5.4	6.6	3.2		15.2	63.2	95.5	46.8	205.5
Sevogle	103	2002	8	28	5.3	8.3	10.7		1.8	6.3	13.5		0.1	8.3	3.4		11.9	1.8	117.8	53.4	173.0
Sevogle	103	2003	9	9	4.7	8.1	11.7		1.2	6.0	18.8		1.1	3.8	5.2		10.2	12.6	56.6	91.8	160.9
Sevogle	104	1994	7	22	4.4	8.1	10.3	9.1	0.9	5.9	12.2	9.0	3.1	8.7	15.0		26.8	31.8	188.9	107.1	327.8
Sevogle	104	1997	10	1	4.8	8.1		8.1	1.2	6.0		6.0	6.3	9.1	0.0		15.4	71.5	126.4	0.0	197.9
Sevogle	104	1998	8	10	4.9	7.6	10.9		1.3	4.9	14.7		1.2	2.7	4.6		8.5	12.7	47.1	30.8	90.7
Sevogle	104	1999	8	30	5.0	7.5	10.4		1.4	4.9	12.9		5.9	3.0	3.5		12.5	121.3	318.7	94.4	534.4
Sevogle	104	2000	8	15	4.8	7.6	10.4		1.4	5.2	12.9		2.6	11.1	16.4		30.1	32.0	228.2	119.5	379.7
Sevogle	104	2001	8	16	5.0	7.7	9.8		1.4	5.3	10.6		9.2	15.0	10.3		34.5	113.4	270.4	72.4	456.2

Appendix 2. (cont'd). Atlantic salmon mean length (cm), mean weight (g), Percent Habitat Saturation (PHS), and biomass (g per 100 m²) by site and year sampled for 1970-2004.

					Average Fork Length (cm)				Average Whole Weight (g)				Percent Habitat Saturation					Biomass (g per 100 m²)			
River	Site	Year	Month	Day	Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	All Parr	Total	Age 0	Age 1	Age 2+	Total
Sevogle	104	2002	8	27	4.5	7.6	10.3		1.0	4.9	11.6		10.7	11.5	8.7		30.9	119.5	190.6	58.3	368.4
Sevogle	104	2003	8	26	4.8	7.2	9.6		1.2	4.3	9.8		5.4	12.1	12.4		29.9	61.4	221.7	85.8	368.9
Sevogle	104	2004	8	17	4.9	8.2	11.0		1.4	6.5	14.4		13.5	16.9	19.7		50.2	162.6	257.0	311.7	731.3
Sevogle	107	2004	9	7	5.4	11.0	14.0		1.9	15.7	38.6		3.7	9.7	6.0		19.5	47.5	163.9	127.8	339.3
Sevogle	108	1994	7	26	5.3	9.2	12.5	11.0	1.7	8.7	21.8	15.2	16.1	5.6	16.6		38.4	198.2	141.3	122.4	461.9
Sevogle	111	1994	8	3	4.6	7.0	9.5	7.8	1.1	3.9	9.6	5.4	2.9	7.7	8.4		19.0	30.8	134.2	58.2	223.1
Sevogle	111	2003	9	8	4.6	7.3	10.4		1.1	4.6	13.0		2.8	11.9	16.7		31.4	32.3	230.6	122.6	385.4
Sevogle	112	1994	8	6																	
Sevogle	112.1	1994	8	6	4.9	7.9	10.8	8.5	1.3	5.6	14.1	6.9	5.4	19.2	10.8		35.5	61.7	323.8	80.3	465.8
Sevogle	152	1996	8	29									0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sevogle	153	1998	8	5	3.8	8.0			0.6	5.8			2.5	7.4	0.0		10.0	25.9	101.0	0.0	127.0
Sevogle	153	1999	9	3	4.6	7.8	9.9		1.1	5.3	11.0		9.4	13.9	8.1		31.4	145.7	198.9	126.8	471.4
Sevogle	153	2000	9	12		8.1	11.3			6.3	21.1		0.0	19.4	5.0		24.4	0.0	315.9	48.0	363.9
Sevogle	153	2001	9	14	4.5	7.1	10.7		1.0	4.1	14.5		8.0	6.1	15.5		29.6	92.5	124.7	114.5	331.7
Sevogle	153	2002	9	4		7.4	10.7			4.7	13.9		0.0	15.6	9.4		25.0	0.0	256.7	69.6	326.3
Sevogle	153	2003	9	8		8.8	10.7			7.4	14.7		0.0	4.2	20.0		24.2	0.0	153.6	150.1	303.6
Sevogle	153	2004	9	1	4.6	8.8	12.4		1.0	7.8	24.8		14.9	3.2	11.8		29.9	164.7	48.5	231.6	444.8
Sevogle	190	1997	8	27	5.3	7.9	10.4	8.4	1.7	5.5	12.7	6.6	10.1	5.4	2.8		18.2	120.7	81.8	18.8	221.2
Sevogle	190	1998	8	21	5.0	7.8	10.5		1.4	5.3	13.2		7.5	7.3	6.9		21.6	86.2	123.9	48.4	258.5
Sevogle	190	1999	9	9	4.9	7.8			1.3	5.3			6.4	6.5	0.0		12.8	77.8	92.3	0.0	170.1
Sevogle	190	2000	9	15	5.7	8.2	9.9		2.1	6.5	10.7		4.3	6.1	5.8		15.9	49.9	113.3	36.5	199.8
Sevogle	190	2001	9	14	5.2	8.5	12.6		1.6	7.0	21.1		7.0	5.1	3.5		15.6	88.2	78.6	23.3	190.1
Sevogle	190	2002	9	5	4.7	8.6	12.2		1.1	6.9	20.5		7.1	6.8	2.8		16.7	79.9	99.1	20.1	199.1
Sevogle	190	2003	8	29	4.8	8.1	11.6		1.2	5.9	17.4		5.4	5.2	2.6		13.3	61.8	76.5	18.1	156.3
Sevogle	190	2004	9	1	5.3	8.1	12.0		1.7	5.9	19.4		5.9	8.3	2.9		17.1	95.8	119.7	49.1	264.6
Sevogle	208	2002	9	24		9.5	11.5			9.9	16.3		0.0	13.1	18.7		31.9	0.0	305.1	130.9	436.0
Sevogle	208	2003	9	5		9.0	12.2			8.4	23.1		0.0	3.2	8.5		11.8	0.0	50.2	163.8	214.0
Sevogle	208	2004	8	26	4.7	9.1	12.3		1.2	8.8	22.9		16.2	7.8	4.8		28.8	197.3	122.5	89.7	407.9
Tomogonops	113	1973	9	11	5.5				1.9				0.0			0.0	0.0	0.6			0.6
Tomogonops	113	1974	8	7	5.3				1.7				0.4			0.0	0.4	4.5			4.5
Tomogonops	113	1975	8	28	5.0			9.2	1.4			8.8	0.2			1.4	1.6	2.0			23.5
Tomogonops	113	1976	9	1	4.7			9.4	1.2			9.5	1.0			2.1	3.1	11.7			44.3
Tomogonops	113	1977	8	11	4.6			9.9	1.1			11.0	0.1			4.3	4.4	1.4			69.4
Tomogonops	113	1978	8	16	4.8			10.3	1.2			12.4	0.5			5.3	5.8	5.7			90.8
Tomogonops	113	1979	7	31				8.0				5.8	0.0			0.9	0.9	0.0			12.4
Tomogonops	113	1994	8	6	5.3	8.6	10.8	9.5	1.7	7.1	14.1	9.7	0.9	7.7	10.1		18.7	9.0	155.5	71.3	235.8
Tomogonops	113	1997	8	26	5.1	8.9		8.9	1.5	8.0		8.0	2.5	4.7	0.0		7.2	27.4	63.1	0.0	90.5
Tomogonops	113	1998	8	6	3.9	7.9			0.7	5.5			0.7	5.2	0.0		5.9	6.8	68.1	0.0	74.9
Tomogonops	113	1999	8	29	4.9	7.5	10.4		1.3	4.8	12.6		9.7	16.3	7.9		33.9	115.1	230.3	126.6	472.0
Tomogonops	113	2000	9	5	5.7	8.1	11.4		2.3	6.1	16.4		7.1	7.3	8.0		22.4	92.8	130.4	56.1	279.3
Tomogonops	113	2001	8	17	5.1	8.1	10.4		1.7	6.5	13.1		4.4	15.1	15.6		35.2	56.5	314.2	115.4	486.2
Tomogonops	113	2002	9	3	5.1	8.0	11.1		1.5	5.4	13.8		6.3	14.2	13.7		34.2	75.1	239.2	90.5	404.8
Tomogonops	113	2003	8	26	4.9	8.1	10.8		1.3	5.9	13.1		4.4	11.1	5.3		20.8	48.8	175.8	34.7	259.2
Tomogonops	114	1994	8	10			12.3				21.0		0.0	0.0	26.2		26.2	0.0	0.0	191.0	191.0
Tomogonops	114	1999	9	8			11.5				17.2			0.0	8.6			0.0	0.0	99.3	99.3
Tomogonops	114	2001	8	17	6.2	9.4	11.9		3.0	10.1	19.9		4.2	22.4	9.6		36.2	54.8	418.3	75.4	548.4

Appendix 2. (cont'd). Atlantic salmon mean length (cm), mean weight (g), Percent Habitat Saturation (PHS), and biomass (g per 100 m²) by site and year sampled for 1970-2004.

					Average Fork Length (cm)				Average Whole Weight (g)				Percent Habitat Saturation					Biomass (g per 100 m²)			
River	Site	Year	Month	Day	Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	All Parr	Total	Age 0	Age 1	Age 2+	Total
Tomogonops	114	2002	9	3	6.5	9.5	12.1		3.4	9.6	19.1		4.8	15.8	17.4		38.0	64.0	317.8	125.4	507.2
Tomogonops	114	2004	8	18		9.9	13.4			11.6	29.7		0.0	12.5	39.5		52.0	0.0	207.9	765.7	973.7
Tomogonops	148	1975	8	28				9.7				10.2	0.0			2.2	2.2	0.0			33.8
Tomogonops	148	1976	8	9	5.3			9.6	1.7			9.9	0.0			2.9	2.9	0.6			45.4
Tomogonops	148	1977	8	11				9.8				10.1				6.3					98.5
Tomogonops	148	1978	8	16				10.1				11.5	0.0			1.7	1.7	0.0			26.8
Tomogonops	149	1976	9	8				8.3				6.5	0.0			0.1	0.1	0.0			2.1
Tomogonops	149	1977	8	11				9.8				10.6				5.3					82.8
Tomogonops	149	1978	8	17				10.7				13.9	0.0			3.2	3.2	0.0			52.2
Tomogonops	149	1979	7	31				11.5				17.2	0.0			1.8	1.8	0.0			29.2
Tomogonops	149	1982	9	21				10.7				13.9				2.3					37.1
Tomogonops	151	1975	8	27				9.5				9.8				20.1					310.7
Tomogonops	151	1976	7	28				13.5				27.6				10.2	10.5				181.2
Tomogonops	151	1977	8	11				9.4				9.5				18.6					287.2
Tomogonops	151	1978	8	17				10.7				14.0	0.0			12.6	15.3	0.0			203.7
Tomogonops	151	1979	7	30				11.1				15.3				6.7	6.7				109.3
Tomogonops	151	1982	9	10									0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LSW Miramichi	43	1971	6	25	3.3	8.8	11.6	10.6	0.4	7.7	17.4	13.6	0.2	0.1	0.5		0.8	2.0	1.9	8.7	12.6
LSW Miramichi	43	1972	8	18	5.2	8.8	11.8	10.3	1.6	7.7	18.6	12.4	0.3	0.2	0.4		0.8	3.9	2.5	5.9	12.3
LSW Miramichi	43	1973	7	20	4.4		11.8	11.8	1.0		18.6	18.6	0.1	0.0	0.7		0.8	1.7	0.0	11.3	1.5
LSW Miramichi	43	1974	7	16	2.8				0.2				0.0	0.0	0.0		0.0	0.4	0.0	0.0	0.4
LSW Miramichi	43	1975	7	16	3.3	8.3		8.3	0.4	6.4		6.4	0.6	3.8	0.0		4.3	6.0	55.0	0.0	61.0
LSW Miramichi	43	1976	9	7	5.4	8.3	11.3	9.8	1.8	6.5	16.3	10.6	2.0	0.2	0.4		2.5	24.3	2.6	6.7	33.6
LSW Miramichi	43	1977	8	25	4.8	8.6	10.8	9.0	1.3	7.1	14.3	8.2	1.8	0.6	0.3		2.7	21.1	9.1	4.6	34.8
LSW Miramichi	43	1978	7	21	3.8				0.6				0.0	0.0	0.0		0.0	0.4	0.0	0.0	0.4
LSW Miramichi	43	1979	7	20	4.8	6.8		6.8	1.2	3.6		3.6	0.1	0.1	0.0		0.2	0.8	1.3	0.0	2.1
LSW Miramichi	43	1980	8	15	5.8				2.2				0.5	0.0	0.0		0.5	6.4	0.0	0.0	6.4
LSW Miramichi	43	1981	7	29	3.9		10.8	10.8	0.7		14.3	14.3	0.9	0.0	0.3		1.3	10.2	0.0	5.5	15.8
LSW Miramichi	43	1982	8	13	4.6	8.4	13.8	9.0	1.1	6.6	29.7	8.2	0.5	1.3	0.6		2.4	5.6	18.8	10.6	35.0
LSW Miramichi	43	1983	8	12	5.3				1.7				1.7	0.0	0.0		1.7	20.9	0.0	0.0	20.9
LSW Miramichi	43	1984	8	24	5.3		10.3	10.3	1.6		12.4	12.4	1.7	0.0	0.9		2.6	21.2	0.0	14.5	18.8
LSW Miramichi	43	1985	8	19	5.1	9.6		9.6	1.5	10.1		10.1	4.0	1.0	0.0		5.1	48.6	16.2	0.0	64.7
LSW Miramichi	43	1986	8	8	4.7	9.0		9.0	1.2	8.3		8.3	4.0	2.1	0.0		6.2	47.2	32.2	0.0	79.4
LSW Miramichi	43	1987	7	10	4.7				1.2				4.7	0.0	0.0		4.7	55.5	0.0	0.0	55.5
LSW Miramichi	43	1988	7	22	4.2				0.9				5.0	0.0	0.0		5.0	56.5	0.0	0.0	56.5
LSW Miramichi	43	1989	7	21	4.0	7.7	9.3	8.5	0.7	5.1	9.1	6.9	6.0	1.0	1.6		8.6	65.6	14.0	25.0	104.6
LSW Miramichi	43	1990	7	13	3.6	7.8		7.8	0.5	5.4		5.4	3.3	0.3	0.0		3.6	34.9	4.4	0.0	39.3
LSW Miramichi	43	1992	7	28	4.0				0.7				0.5	0.0	0.0		0.5	5.9	0.0	0.0	5.9
LSW Miramichi	43	1993	7	30	4.0	8.7		8.7	0.7	7.4		7.4	2.5	4.7	0.0		7.2	27.2	69.6	0.0	96.8
LSW Miramichi	43	1994	7	19									0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LSW Miramichi	43	1995	9	28	4.3	8.4		8.4	0.9	6.6		6.6	3.9	10.2	0.0		14.0	41.6	142.7	0.0	184.3
LSW Miramichi	43	1996	9	3	4.1	8.6	12.4	9.1	0.8	7.1	21.6	8.4	6.3	10.0	3.8		20.1	69.1	89.2	220.7	379.0
LSW Miramichi	43	1997	10	3	5.1	8.0		8.0	1.5	5.8		5.8	3.2	6.5	0.0		9.7	35.2	87.1	0.0	122.4
LSW Miramichi	43	1998	8	21	4.4	8.5	11.5		0.9	6.9	17.2		3.7	2.1	4.7		10.6	40.1	44.0	31.3	115.4
LSW Miramichi	43	1999	8	26	4.6	7.8	11.5		1.1	5.3	17.2		5.2	13.7	9.5		28.4	63.9	85.4	27.3	176.5
LSW Miramichi	43	2000	8	31	5.3	9.5			1.7	9.3			3.5	4.8	0.0		8.3	39.2	62.7	0.0	101.8

Appendix 2. (cont'd). Atlantic salmon mean length (cm), mean weight (g), Percent Habitat Saturation (PHS), and biomass (g per 100 m²) by site and year sampled for 1970-2004.

River	Site	Year	Month	Day	Average Fork Length (cm)				Average Whole Weight (g)				Percent Habitat Saturation					Biomass (g per 100 m²)			
					Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	All Parr	Total	Age 0	Age 1	Age 2+	Total
LSW Miramichi	43	2001	8	28	4.2	8.0			1.2	6.3			1.5	7.6	0.0		9.1	20.9	113.0	0.0	133.9
LSW Miramichi	43	2002	9	4	4.7	8.9			1.1	7.7			6.1	5.1	0.0		11.2	66.4	66.7	0.0	133.0
LSW Miramichi	43	2003	9	3	5.3	8.9	11.1		1.6	8.3	14.5		2.0	4.5	2.6		9.1	22.2	74.0	16.3	112.6
LSW Miramichi	43	2004	8	23	5.0	9.5			1.4	9.0			5.0	6.4	0.0		11.4	58.7	92.8	0.0	151.6
LSW Miramichi	44	1971	6	28	3.6	8.3	12.8	8.5	0.5	6.5	23.7	7.0	0.0	4.2	0.6		4.8	0.4	61.6	9.8	71.8
LSW Miramichi	44	1972	8	21	5.3	8.8	11.2	10.1	1.7	7.6	15.8	11.6	0.8	2.9	6.5		10.1	9.3	43.3	106.9	159.5
LSW Miramichi	44	1973	7	23	4.1	8.0		8.1	0.8	5.7		5.9	0.2	0.5	0.0		0.7	2.6	7.3	0.0	9.9
LSW Miramichi	44	1974	8	26	4.8	9.1	11.4	9.5	1.3	8.4	16.8	9.6	1.2	4.5	0.6		6.3	14.2	67.6	10.4	92.2
LSW Miramichi	44	1975	8	20	4.7	8.0	11.3	8.3	1.1	5.7	16.3	6.5	1.2	7.2	2.4		10.8	14.1	103.8	40.3	158.3
LSW Miramichi	44	1976	8	23	5.5	7.7	10.7	8.3	1.9	5.2	13.9	6.5	1.8	3.7	1.4		6.9	23.0	52.2	22.8	98.0
LSW Miramichi	44	1977	8	3	3.6	8.2	12.8	9.1	0.5	6.2	23.7	8.5	0.1	0.5	0.4		1.0	1.5	7.2	6.9	15.5
LSW Miramichi	44	1978	8	1	2.9	9.5	11.6		0.3	9.7	17.7		0.2	2.5	1.0		3.6	1.7	38.8	15.9	56.4
LSW Miramichi	44	1979	10	1	5.9	9.2		9.2	2.4	8.9		8.2	2.6	1.9	0.0		4.5	33.6	29.4	0.0	63.0
LSW Miramichi	44	1980	9	17	6.4	9.5	11.8	9.6	3.0	9.7	18.6	10.1	2.2	4.9	0.5		7.6	29.8	75.8	7.6	113.2
LSW Miramichi	44	1981	8	25	4.6	8.8	11.4	9.5	1.1	7.7	16.9	9.6	3.6	4.9	3.8		12.2	41.8	72.9	62.7	177.4
LSW Miramichi	44	1982	9	13	5.2	8.1	13.6	8.6	1.6	6.1	28.7	7.2	1.0	5.4	1.9		8.3	11.9	78.1	34.4	124.4
LSW Miramichi	44	1983	7	5	4.3	8.3	9.8	8.8	0.9	6.5	10.6	7.7	0.2	0.5	0.4		1.1	2.7	7.0	5.8	15.6
LSW Miramichi	44	1984	7	31	4.2	8.5	10.4	9.3	0.8	6.9	12.8	9.0	1.0	1.2	1.4		3.6	11.6	17.7	22.1	51.4
LSW Miramichi	44	1985	8	6	4.5	9.3		9.3	1.0	9.0		9.0	2.7	2.8	0.0		5.5	30.8	43.2	0.0	74.0
LSW Miramichi	44	1986	8	6	4.7	8.5	11.7	9.1	1.2	6.9	17.9	8.6	1.5	5.4	3.1		10.1	18.1	80.4	52.0	150.5
LSW Miramichi	44	1987	7	24	4.3	7.4	11.7	9.4	0.9	4.7	18.0	9.4	2.5	3.7	10.3		16.5	27.8	52.2	173.1	253.1
LSW Miramichi	44	1988	7	14	3.7	7.9	12.0	9.6	0.6	5.5	19.4	10.1	1.7	2.6	5.9		10.3	18.5	37.7	99.7	155.8
LSW Miramichi	44	1989	7	3	3.3	7.8		7.8	0.4	5.4		5.4	1.3	1.0	0.0		2.3	13.0	15.0	0.0	28.1
LSW Miramichi	44	1990	7	5	3.2	7.6	11.8	7.9	0.4	5.0	18.6	5.7	1.1	2.6	0.8		4.5	10.6	36.8	13.7	61.0
LSW Miramichi	44	1992	7	27	3.8	7.6		7.6	0.6	4.9		4.9	7.3	7.3	0.0		14.6	78.2	103.8	0.0	182.0
LSW Miramichi	44	1993	7	22	3.7	8.1	10.2	8.6	0.6	5.9	12.0	7.2	3.2	2.9	4.8		10.9	33.8	41.7	75.9	151.4
LSW Miramichi	44	1994	7	19	3.9	7.8	10.4	9.1	0.6	5.0	11.7	8.3	2.8	2.5	5.3		10.5	26.7	47.7	32.1	106.5
LSW Miramichi	44	1995	9	26	4.9	8.3	11.1	8.5	1.4	6.6	15.5	6.9	11.2	16.7	1.9		29.8	132.5	250.6	13.5	396.7
LSW Miramichi	44	1996	9	3	4.9	8.2		8.2	1.3	6.3		6.3	13.6	5.9	0.0		19.5	161.3	101.2	0.0	262.5
LSW Miramichi	44	1997	10	3	5.3	8.1	11.4	9.1	1.7	6.1	16.9	8.6	11.5	11.2	11.6		34.2	138.2	199.1	85.8	423.0
LSW Miramichi	44	1998	8	21	4.6	7.8			1.1	5.3			8.6	33.8	0.0		42.3	97.7	179.1	0.0	276.8
LSW Miramichi	44	1999	8	28	4.5	7.1	10.2		1.0	4.1	12.0		9.7	12.5	3.2		25.4	51.1	172.6	49.9	273.6
LSW Miramichi	44	2000	9	15	5.5	8.6	12.0		1.9	7.3	20.6		12.9	10.5	6.3		29.7	164.2	173.6	48.5	386.3
LSW Miramichi	44	2001	8	28	4.6	8.0			1.2	6.1			4.4	15.0	0.0		19.4	53.1	226.5	0.0	279.6
LSW Miramichi	44	2002	9	4	4.6	8.1	11.9		1.1	5.9	18.3		8.9	9.6	8.0		26.5	102.7	153.5	56.2	312.4
LSW Miramichi	44	2003	9	23	4.9	7.5	12.1		1.4	6.0			5.2	6.6	2.3		14.1	62.7	116.6	0.0	179.2
LSW Miramichi	44	2004	8	24	4.7	8.1	11.3		1.3	6.4	16.2		8.3	6.4	15.1		29.8	107.1	98.8	251.0	456.8
LSW Miramichi	45	1971	6	23	3.3	6.8	8.8	8.0	0.4	3.6	7.7	5.8	0.9	0.2	0.5		1.6	9.4	2.1	7.0	18.5
LSW Miramichi	45	1972	8	15	4.1				0.8				0.4	0.0	0.0		0.4	3.9	0.0	0.0	3.9
LSW Miramichi	45	1973	7	30	3.9	8.8		8.8	0.7	7.7		7.7	1.9	0.5	0.0		2.4	20.9	7.3	0.0	28.2
LSW Miramichi	45	1974	8	27	4.7	10.6		10.6	1.2	13.3		13.3	1.5	0.8	0.0		2.3	18.0	12.9	0.0	30.9
LSW Miramichi	45	1975	8	12	4.2		13.3	13.3	0.8		26.6	26.6	1.5	0.0	0.7		2.2	16.2	0.0	12.6	14.5
LSW Miramichi	45	1976	7	22	3.2	7.8	12.8	10.3	0.4	5.4	23.7	12.4	0.4	0.4	1.5		2.3	4.5	5.7	25.3	35.4
LSW Miramichi	45	1977	8	19	4.7		10.3	10.3	1.2		12.4	12.4	4.6	0.0	0.3		4.9	53.5	0.0	5.5	59.0
LSW Miramichi	45	1978	8	23	4.6	8.8		8.8	1.1	7.7		7.7	1.1	0.2	0.0		1.4	13.0	3.5	0.0	16.5
LSW Miramichi	45	1979	9	17	5.5	9.3	11.8	10.6	1.9	9.1	18.6	13.3	1.8	0.2	0.4		2.4	22.3	3.3	6.8	32.5

Appendix 2. (cont'd). Atlantic salmon mean length (cm), mean weight (g), Percent Habitat Saturation (PHS), and biomass (g per 100 m²) by site and year sampled for 1970-2004.

River	Site	Year	Month	Day	Average Fork Length (cm)				Average Whole Weight (g)				Percent Habitat Saturation					Biomass (g per 100 m²)			
					Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	All Parr	Total	Age 0	Age 1	Age 2+	Total
LSW Miramichi	45	1980	9	5	5.5	9.3	12.8	11.1	1.9	9.1	23.7	15.3	1.7	0.2	0.5		2.4	21.3	3.4	8.9	33.6
LSW Miramichi	45	1981	7	31	3.7		10.6	10.6	0.5		13.3	13.3	1.4	0.0	0.7		2.1	14.8	0.0	10.8	13.2
LSW Miramichi	45	1982	9	22	4.8	8.7		8.7	1.2	7.3		7.3	0.4	4.6	0.0		5.0	5.1	68.6	0.0	73.6
LSW Miramichi	45	1983	8	8	4.3		10.8	10.8	0.9		14.3	14.3	2.3	0.0	0.5		2.8	26.0	0.0	7.3	23.2
LSW Miramichi	45	1984	7	31	3.5	9.3		9.3	0.5	9.1		9.1	1.4	0.3	0.0		1.7	14.7	4.8	0.0	19.5
LSW Miramichi	45	1985	8	12	4.0	7.9		7.9	0.7	5.6		5.6	2.3	0.9	0.0		3.3	25.5	13.6	0.0	39.1
LSW Miramichi	45	1986	8	7	4.5	8.7		8.7	1.0	7.5		7.5	2.1	1.4	0.0		3.5	24.2	21.0	0.0	45.2
LSW Miramichi	45	1993	8	30	4.4				1.0				4.1	0.0	0.0		4.1	44.8	0.0	0.0	44.8
LSW Miramichi	45	1994	7	26	4.0	7.9		7.9	0.6	5.4		5.4	4.3	2.8	0.0		7.1	41.1	34.6	0.0	75.6
LSW Miramichi	45	1995	9	26	5.5	8.4	12.4	9.6	1.9	6.6	21.5	9.9	11.1	4.9	17.2		33.1	134.4	116.8	126.8	378.0
LSW Miramichi	45	1996	9	6	4.8	8.7	12.8	8.7	1.2	7.4	23.5	7.4	6.8	1.6	4.7		13.1	76.9	25.1	7.6	109.5
LSW Miramichi	45	1997	10	1	5.4	8.1	10.9	10.3	1.8	5.9	14.8	12.3	7.1	1.8	13.5		22.5	84.4	70.9	93.5	248.7
LSW Miramichi	45	1998	8	20	4.7	8.3	11.4		1.2	6.5	16.8		7.7	5.5	4.2		17.4	88.1	89.5	29.0	206.5
LSW Miramichi	45	1999	8	24	4.4	8.9	12.8		1.0	8.0	23.7		7.8	1.5	3.1		12.4	108.2	22.3	54.6	185.1
LSW Miramichi	45	2000	8	21	4.8	9.1	11.5		1.4	8.6	18.2		7.4	3.4	3.2		14.0	98.0	60.8	22.4	181.2
LSW Miramichi	45	2001	9	12	4.9	8.6			1.4	6.8			8.5	5.5	0.0		14.0	105.7	71.1	0.0	176.8
LSW Miramichi	45	2002	9	6	4.8	9.1			1.2	8.1			8.1	5.6	0.0		13.6	93.4	71.6	0.0	165.0
LSW Miramichi	45	2003	9	4	4.6	8.9			1.2	8.6	22.5		5.5	8.5	0.0		14.0	68.5	128.0	0.0	196.5
LSW Miramichi	45	2004	9	7	4.9	9.5	13.9		1.4	10.1	31.2		6.1	13.1	11.8		31.0	73.2	211.1	216.1	500.4
LSW Miramichi	46	1971	6	22	3.3	7.2	12.7	10.3	0.4	4.2	23.0	12.5	0.3	0.2	6.7		7.2	3.2	2.8	115.7	121.7
LSW Miramichi	46	1972	8	16		9.3	11.8	10.3		9.0	18.6	12.4	0.0	2.8	4.5		7.3	0.0	43.4	75.7	119.1
LSW Miramichi	46	1973	7	5	3.2	9.1	11.6	10.6	0.3	8.4	17.8	13.5	0.6	0.4	1.3		2.3	5.5	6.8	21.7	34.0
LSW Miramichi	46	1974	7	17	4.8	7.9	12.8	8.0	1.2	5.5	23.7	5.8	0.1	13.0	1.5		14.5	0.9	185.9	25.7	212.5
LSW Miramichi	46	1975	7	15		8.7	10.9	10.7		7.4	14.8	13.8	0.0	0.7	10.4		11.2	0.0	10.7	170.5	181.1
LSW Miramichi	46	1976	7	21	4.9	7.9	13.7	9.5	1.3	5.5	29.1	9.7	0.2	1.6	2.6		4.5	2.7	23.2	46.9	72.8
LSW Miramichi	46	1977	7	12	3.4	9.7	12.6	10.7	0.4	10.3	22.6	13.9	4.4	3.0	3.1		10.5	45.0	46.2	54.2	145.4
LSW Miramichi	46	1978	7	10	3.5	7.0	11.6	7.1	0.5	3.9	17.4	4.1	5.2	7.3	0.7		13.2	53.6	99.6	11.5	164.7
LSW Miramichi	46	1979	7	10	2.8	6.2	9.9	7.5	0.2	2.7	11.0	4.8	0.0	2.9	5.4		8.3	0.1	37.2	84.9	0.1
LSW Miramichi	46	1980	7	10	4.0	7.6	10.2	9.0	0.7	4.9	11.9	8.2	0.2	2.2	5.6		8.0	1.9	30.8	89.5	122.3
LSW Miramichi	46	1981	6	30	2.4	7.6	10.0	8.8	0.1	4.9	11.2	7.7	0.0	1.7	3.7		5.4	0.4	23.4	58.2	82.0
LSW Miramichi	46	1982	6	28		8.0	11.2	8.6		5.9	15.8	7.1	0.0	3.0	1.5		4.5	0.0	43.1	24.4	67.5
LSW Miramichi	46	1983	7	13	3.9	8.1	10.6	9.2	0.7	6.1	13.4	8.7	0.3	5.5	6.8		12.7	3.6	80.3	110.1	194.0
LSW Miramichi	46	1984	7	9		8.3	11.4	9.2		6.4	16.7	8.8	0.0	4.9	4.8		9.8	0.0	72.1	80.1	152.2
LSW Miramichi	46	1985	7	15		9.3	12.3	9.8		9.0	21.1	10.6	0.0	6.6	2.8		9.4	0.0	101.6	47.4	149.0
LSW Miramichi	46	1986	7	23	4.1		11.1	11.1	0.7		15.3	15.3	0.1	0.0	4.0		4.1	0.9	0.0	66.3	0.8
LSW Miramichi	46	1987	7	15		8.5	11.1	9.2		7.0	15.5	8.8	0.0	4.5	3.2		7.6	0.0	66.0	52.2	118.2
LSW Miramichi	46	1988	7	19	4.3	8.1	11.7	8.5	0.9	5.9	17.9	6.9	1.4	23.9	8.3		33.6	16.0	346.5	138.8	501.3
LSW Miramichi	46	1989	7	14	3.6	7.7	11.2	8.9	0.5	5.2	15.8	7.9	2.7	4.0	5.2		11.9	28.0	57.1	86.1	171.2
LSW Miramichi	46	1990	7	16		7.8	11.3	8.1		5.4	16.3	5.9	0.0	5.4	1.2		6.6	0.0	77.9	19.6	97.5
LSW Miramichi	46	1991	8	4	4.5	8.5	10.6	9.9	1.0	7.0	13.4	11.0	4.1	2.2	5.9		12.2	47.5	32.6	95.4	175.4
LSW Miramichi	46	1992	7	17	3.4	7.4	11.4	7.8	0.4	4.6	17.0	5.4	1.1	13.2	4.7		19.0	11.2	185.2	77.7	274.1
LSW Miramichi	46	1993	7	21	3.7	7.7	10.6	8.9	0.6	5.2	13.4	8.0	1.2	4.1	6.5		11.8	13.2	57.9	105.3	176.4
LSW Miramichi	46	1994	7	25	4.7	7.7	10.4	8.5	1.0	4.6	11.2	6.2	0.1	2.9	2.9		5.8	1.1	35.9	40.8	77.8
LSW Miramichi	46	1995	9	26		9.0	11.1	9.1		8.3	15.3	8.5	0.0	5.5	7.1		12.6	0.0	110.7	48.7	159.4
LSW Miramichi	46	1996	9	6		8.7	12.8	12.6		7.4	23.5	22.5	0.0	1.1	12.3		13.4	0.0	49.3	86.3	181.0
LSW Miramichi	46	1997	10	2		8.9	12.7	9.4		7.9	23.2	9.5	0.0	4.1	1.9		6.0	0.0	61.6	33.1	94.6

Appendix 2. (cont'd). Atlantic salmon mean length (cm), mean weight (g), Percent Habitat Saturation (PHS), and biomass (g per 100 m²) by site and year sampled for 1970-2004.

					Average Fork Length (cm)				Average Whole Weight (g)				Percent Habitat Saturation					Biomass (g per 100 m²)			
River	Site	Year	Month	Day	Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	All Parr	Total	Age 0	Age 1	Age 2+	Total
LSW Miramichi	46	1998	8	20		8.3	11.6			6.4	17.4		0.0	6.8	13.0		19.9	0.0	139.6	94.6	234.2
LSW Miramichi	46	1999	8	28	5.7	9.9			2.1	11.0			12.3	11.5	0.0		23.9	188.6	106.7	0.0	295.3
LSW Miramichi	46	2000	9	7	6.1	8.3	10.3		3.3	6.7	12.6		2.2	6.3	3.7		12.2	33.2	106.2	25.3	164.6
LSW Miramichi	46	2001	8	17	5.7	8.3	11.2		1.9	6.3	15.0		0.5	11.2	17.6		29.4	6.5	158.4	272.6	437.5
LSW Miramichi	46	2002	8	30	5.6	8.4	10.9		2.1	6.6	14.7		0.1	7.0	10.6		17.6	0.8	101.8	173.2	275.8
LSW Miramichi	46	2003	9	4		8.4	11.4			6.6	16.9		0.0	7.0	5.8		12.8	0.0	102.6	97.9	200.5
LSW Miramichi	46	2004	8	23	4.8		11.4		1.2		16.4		9.0	0.0	5.0		14.0	103.9	0.0	81.8	185.7
LSW Miramichi	100	1994	7	19	4.2	7.5		7.5	0.8	4.5		4.2	1.4	2.0	0.0		3.4	13.5	23.2	0.0	36.6
LSW Miramichi	100	1999	9	8	4.7	7.3	9.3		1.2	4.4	9.1		8.8	17.3	9.4		35.6	258.8	191.3	79.1	529.2
LSW Miramichi	100	2001	8	28	4.8	7.9	11.3		1.2	5.5	16.3		5.4	14.4	5.5		25.4	62.6	223.9	40.8	327.3
LSW Miramichi	100	2002	9	4	4.8	8.7	11.7		1.2	7.5	16.8		6.6	9.8	15.9		32.3	74.7	207.4	109.3	391.3
LSW Miramichi	100	2004	8	24	5.0	8.3	11.7		1.6	6.9	18.8		5.4	13.3	24.2		42.8	73.5	205.8	413.6	692.9
LSW Miramichi	101	1994	7	19	4.0	7.9	10.6	8.8	0.7	5.6	12.7	8.0	2.2	5.7	6.1		14.0	20.8	99.6	39.8	160.1
LSW Miramichi	102	1994	7	19			12.2	12.2			21.8	21.8	0.0	0.0	9.4		9.4	0.0	0.0	66.2	66.2
LSW Miramichi	103	2004	9	8	5.8	8.5	11.1		2.4	7.2	15.8		1.1	7.3	5.3		13.7	15.2	112.5	87.5	215.1
LSW Miramichi	105	1994	7	26	4.3				0.8				4.5	0.0	0.0		4.5	45.2	0.0	0.0	45.2
LSW Miramichi	105	1995	9	22	4.8	8.6	11.3	9.6	1.2	7.3	16.2	10.0	5.4	7.0	8.4		20.8	60.9	132.0	59.4	252.3
LSW Miramichi	106	1994	8	22	4.4				1.9				0.6	0.0	0.0		0.6	12.4	0.0	0.0	12.4
LSW Miramichi	106.1	1994	7	26	4.7		10.8	10.8	1.1		13.2	13.2	7.7	0.0	13.8		21.5	79.0	0.0	87.7	166.7
LSW Miramichi	107	1994	7	26	3.8				0.6				0.4	0.0	0.0		0.4	4.3	0.0	0.0	4.3
LSW Miramichi	107	1995	9	22		9.0	12.9	10.6		8.2	24.3	13.5	0.0	4.0	6.8		10.8	0.0	163.0	104.8	267.9
LSW Miramichi	107	1997	9	19	6.4	7.2	12.1	10.8	2.9	4.2	19.9	14.2	4.8	2.1	23.4		30.3	58.1	73.0	172.2	303.2
LSW Miramichi	107	1998	8	20	5.9	9.7	11.5		2.3	10.3	17.0		6.7	4.5	13.9		25.1	80.1	139.6	98.2	317.8
LSW Miramichi	107	1999	8	28	5.3	9.5	10.6		1.7	9.5	13.5		12.1	21.3	18.5		51.9	80.4	97.9	24.3	202.6
LSW Miramichi	107	2000	8	21	5.6	9.8	11.8		2.3	11.7	22.1		4.7	2.0	6.5		13.2	63.2	65.3	52.1	180.6
LSW Miramichi	107	2001	9	12	6.4	10.4	16.3		3.2	12.7	53.1		1.1	11.2	6.2		18.4	15.2	180.1	62.2	257.5
LSW Miramichi	107	2002	9	6	5.7	10.6			2.1	13.3			5.2	11.4	0.0		16.6	63.9	164.6	0.0	228.5
LSW Miramichi	107.1	1994	7	26	4.9	8.8	10.8	9.2	1.3	7.8	14.3	8.9	0.9	8.7	3.7		13.3	8.6	141.1	25.5	175.2
LSW Miramichi	107.1	1995	9	22	5.5	9.8	16.2	11.9	1.9	10.5	48.1	19.1	0.9	11.2	21.1		33.3	9.6	99.3	80.3	189.2
LSW Miramichi	144	1995	9	11		9.8		9.8		10.7		10.7	0.0	11.2	0.0		11.2	0.0	163.5	0.0	163.5
LSW Miramichi	145	1996	9	6	5.5	9.3	12.9	10.7	1.9	9.1	24.5	13.7	12.0	16.2	23.1		51.3	146.7	331.6	180.7	659.0
LSW Miramichi	145	1997	8	29	5.4	8.8	12.1	9.8	1.7	7.7	20.1	10.5	5.6	19.2	18.3		43.1	64.6	359.6	141.3	565.6
LSW Miramichi	145	1998	8	20	5.2	8.4	11.4		1.6	6.8	16.8		4.9	12.5	17.5		34.9	56.7	250.3	130.4	437.4
LSW Miramichi	145	1999	8	24	5.4	9.2	12.1		1.7	8.7	20.2		32.0	16.5	15.2		63.7	42.6	360.7	129.6	532.9
LSW Miramichi	145	2000	9	7	5.6	9.2	11.1		2.2	9.0	21.1		8.6	14.0	22.6		45.3	115.4	338.1	226.8	680.3
LSW Miramichi	145	2001	9	12	6.4	8.9	12.3		3.4	8.7	22.6		4.0	16.2	25.4		45.6	55.9	374.7	208.7	639.3
LSW Miramichi	145	2002	9	6	5.6	9.4	12.9		2.0	9.8	24.9		2.7	22.8	16.9		42.4	30.5	440.2	135.5	606.2
LSW Miramichi	145	2003	9	23	5.4	8.5	11.6		2.0	8.1	18.3		2.5	15.7	8.8		27.0	32.5	307.7	68.0	408.1
LSW Miramichi	145	2004	9	7	5.5	8.9	12.2		2.1	8.5	20.4		5.1	26.0	23.2		54.3	68.0	436.0	396.6	900.6
LSW Miramichi	146	1982	8	16	4.4			8.0	1.0			5.9	0.2			19.5	19.7	1.9			284.8
LSW Miramichi	146	1982	8	17	4.8			8.0	1.3			5.8	0.6			17.8	18.4	6.8			264.7
LSW Miramichi	146	1996	8	29	4.8	8.4	11.2	8.7	1.2	6.6	15.9	7.5	9.9	14.7	4.5		29.1	114.8	230.8	33.0	378.6
LSW Miramichi	146	1998	9	4	5.1	8.3	11.8		1.5	6.4	18.4		16.7	8.5	10.7		35.9	202.8	154.0	78.3	435.0
LSW Miramichi	146	1999	9	10	5.4	8.4	10.6		1.8	6.6	13.4		12.9	5.7	0.0		18.7	430.1	236.2	76.6	743.0
LSW Miramichi	146	2000	9	12	5.1	8.9	12.1		1.6	8.0	19.7		5.2	18.7	10.5		34.5	64.7	324.7	78.0	467.4
LSW Miramichi	146	2001	8	22	4.9	8.2	11.8		1.3	6.2	18.4		12.1	11.9	12.8		36.8	147.2	212.2	95.2	454.6

Appendix 2. (cont'd). Atlantic salmon mean length (cm), mean weight (g), Percent Habitat Saturation (PHS), and biomass (g per 100 m²) by site and year sampled for 1970-2004.

					Average Fork Length (cm)				Average Whole Weight (g)				Percent Habitat Saturation					Biomass (g per 100 m²)			
River	Site	Year	Month	Day	Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	All Parr	Total	Age 0	Age 1	Age 2+	Total
LSW Miramichi	146	2002	9	9	5.2	8.9	11.7		1.7	8.1	18.3		8.2	17.4	19.8		45.4	103.6	351.2	150.9	605.6
LSW Miramichi	147	1982	8	16	4.5			7.8	1.0			5.4	0.1			8.4	8.6	1.3			122.2
LSW Miramichi	147	1996	8	29	4.3	7.9	11.0	8.4	0.9	5.7	14.9	6.8	10.8	11.6	5.4		27.7	122.4	182.3	38.7	343.3
LSW Miramichi	147	1997	9	15	4.3	6.9	10.4	7.2	0.9	3.8	12.7	4.2	13.4	15.0	3.1		31.5	153.2	218.1	22.6	393.9
LSW Miramichi	147	1998	9	4	4.3	7.3	10.4		0.9	4.4	12.5		7.2	8.3	5.1		20.6	79.6	128.8	35.9	244.3
LSW Miramichi	147	1999	9	10	5.1	7.9			1.5	5.6			16.6	8.9	0.0		25.5	127.9	65.0	0.0	192.9
LSW Miramichi	147	2000	9	12	4.4	7.7	10.8		0.9	5.2	14.0		9.7	10.7	8.5		28.9	110.7	181.0	60.7	352.5
LSW Miramichi	147	2001	8	22	4.3	6.9	10.7		0.9	3.7	13.7		6.0	8.7	6.5		21.1	67.5	133.2	46.2	247.0
LSW Miramichi	147	2002	9	9	4.4	8.0	11.0		1.0	5.8	15.4		12.7	14.6	8.5		35.8	149.2	242.9	63.3	455.3
LSW Miramichi	147	2003	9	8	4.8	7.9	10.6		1.3	5.9	15.6		4.9	11.1	5.4		21.4	59.5	188.7	44.0	292.1
LSW Miramichi	147	2004	9	1	4.6	8.0	11.2		1.1	5.8	17.1		10.6	7.0	14.9		32.4	118.1	100.0	262.6	480.7
LSW Miramichi	205	2001	9	12	5.1	9.5	12.8		1.6	10.8	25.5		8.8	15.6	14.8		39.2	111.3	328.3	122.1	561.7
LSW Miramichi	207	2001	8	22	5.0	10.1	13.5		1.4	11.7	27.8		1.0	9.8	8.3		19.1	10.0	177.9	62.0	249.9
LSW Miramichi	207	2002	9	9		11.4	14.7			16.7	38.8		0.0	6.6	6.4		13.0	0.0	124.3	50.4	174.7
Barnaby	97	1971	9	1	5.4		13.8	13.8	1.8		29.7	29.7	0.4	0.0	0.8		1.2	5.0	0.0	15.1	20.1
Barnaby	97	1972	8	24		8.8	11.3	10.7		7.7	16.3	14.0	0.0	0.4	2.4		2.8	0.0	5.5	40.5	46.0
Barnaby	97	1973	8	15	5.2		14.3	14.3	1.5		33.1	33.1	1.6	0.0	1.5		3.2	19.8	0.0	28.0	47.8
Barnaby	97	1974	8	20		11.1		11.1		15.3		15.3	0.0	4.9	0.0		4.9	0.0	80.9	0.0	80.9
Barnaby	97	1975	8	29	5.3	9.0	12.3	10.6	1.6	8.2	21.1	13.6	0.5	0.5	1.2		2.2	6.2	7.9	20.3	34.3
Barnaby	97	1976	8	20		7.8	10.6	9.9		5.4	13.6	11.1	0.0	0.1	0.8		0.9	0.0	1.6	12.4	14.1
Barnaby	97	1977	8	24		9.3	12.3	11.3		9.1	21.1	16.3	0.0	0.2	0.8		1.0	0.0	3.1	14.2	17.3
Barnaby	97	1978	8	30	4.5	9.8	13.6	10.4	1.0	10.5	28.2	12.7	0.7	2.0	1.0		3.6	7.5	31.7	17.0	56.2
Barnaby	97	1982	9	15	6.2	9.4	13.3	10.6	2.7	9.3	26.6	13.3	0.4	1.7	1.9		4.0	5.6	26.8	32.9	65.3
Barnaby	97	1983	9	29	6.0	10.8	12.6	11.4	2.5	14.3	22.4	16.7	2.5	1.5	1.1		5.0	32.4	23.7	18.6	74.7
Barnaby	97	1984	8	31		9.7	11.8	9.7		10.2	18.6	10.4	0.0	3.9	0.2		4.2	0.0	61.3	4.0	65.3
Barnaby	97	1993	9	8	5.3	9.3	14.1	10.3	1.7	9.1	31.7	12.4	9.1	9.1	6.8		25.0	108.4	149.8	51.6	309.8
Barnaby	97	1994	8	17	4.5	8.3	11.5	9.6	1.0	6.4	17.1	10.0	0.1	2.3	3.6		6.1	1.6	34.3	60.7	96.7
Barnaby	97	1997	9	11	5.0	8.5	11.5	9.6	1.4	7.0	17.0	10.1	4.6	12.5	16.7		33.9	52.3	247.7	124.8	424.9
Barnaby	97	1998	8	18		8.4	13.5			6.6	27.8		0.0	5.8	2.9		8.7	0.0	85.2	21.3	106.5
Barnaby	97	1999	8	16	4.3	8.2	11.0		0.9	6.3	15.1		6.1	9.8	18.2		34.1	4.0	91.7	85.4	181.1
Barnaby	97	2001	9	11		8.7	12.5			7.8	19.4		0.0	13.5	2.2		15.7	0.0	213.4	14.3	227.8
Barnaby	98	1971	8	31	6.8		13.8	11.8	3.5		29.7	18.6	1.8	0.0	1.2		2.9	23.7	0.0	20.6	44.3
Barnaby	98	1972	9	15		11.1	12.8	11.9		15.4	23.9	18.8	0.0	7.0	5.6		12.6	0.0	115.2	97.8	213.1
Barnaby	98	1973	7	26	4.8		13.3	13.3	1.3		26.6	26.6	1.9	0.0	0.4		2.3	22.3	0.0	7.2	29.6
Barnaby	98	1974	7	12		10.7	12.3	11.3		13.8	20.9	16.2	0.0	6.6	5.5		12.1	0.0	107.5	93.8	201.3
Barnaby	98	1975	7	11	4.6		13.8	13.7	1.1		30.0	29.0	0.2	0.0	6.5		6.7	2.4	0.0	116.5	118.9
Barnaby	98	1976	7	5	3.1	9.2	12.1	10.8	0.3	8.9	19.9	14.3	0.0	1.4	3.5		4.9	0.2	21.8	59.3	81.3
Barnaby	98	1977	7	15	3.7	8.8	12.6	12.2	0.6	7.7	22.4	20.6	0.1	0.2	4.1		4.4	1.5	2.4	70.4	74.4
Barnaby	98	1978	8	25	5.2		12.0	12.0	1.6		19.4	19.4	2.0	0.0	6.8		8.8	24.9	0.0	114.5	139.4
Barnaby	98	1982	9	15		8.6	13.0	12.2		7.1	24.9	20.7	0.0	0.5	7.1		7.6	0.0	7.4	123.7	131.1
Barnaby	98	1983	9	30		8.2	13.0	11.3		6.2	24.6	16.4	0.0	2.3	14.4		16.7	0.0	33.0	251.7	284.7
Barnaby	98	1984	8	29	4.3	10.0	12.6	11.6	0.9	11.3	22.5	17.7	0.0	2.6	10.6		13.2	0.4	40.5	182.2	223.2
Barnaby	98	1993	9	8	7.0	10.6		10.7	3.9	13.6		13.9	10.3	36.6	0.0		46.9	132.2	592.2	0.0	724.4
Barnaby	98	1997	8	26	6.4	10.3	13.0	10.7	3.0	12.3	24.6	13.9	4.5	36.6	12.7		53.7	54.1	658.1	100.8	813.0
Barnaby	98	1998	8	18		9.2	10.9			8.8	14.7		0.0	11.1	10.8		21.9	0.0	221.6	77.3	298.9
Barnaby	98	1999	8	16	6.4	9.5	13.5		2.9	9.7	27.7		46.1	20.1	30.0		96.2	216.5	326.7	245.5	788.7

Appendix 2. (cont'd). Atlantic salmon mean length (cm), mean weight (g), Percent Habitat Saturation (PHS), and biomass (g per 100 m²) by site and year sampled for 1970-2004.

River	Site	Year	Month	Day	Average Fork Length (cm)				Average Whole Weight (g)				Percent Habitat Saturation					Biomass (g per 100 m²)			
					Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	All Parr	Total	Age 0	Age 1	Age 2+	Total
Barnaby	98	2000	9	8	7.1	12.0			4.4	21.0			31.4	28.9	0.0		60.3	482.0	510.8	0.0	992.8
Barnaby	98	2001	9	11		10.1				12.8			0.0	25.2	0.0		25.2	0.0	424.3	0.0	424.3
Barnaby	98	2002	9	9		12.2				22.0			0.0	21.9	0.0		21.9	0.0	377.9	0.0	377.9
Barnaby	98	2003	9	26	7.3	10.5			4.3	12.8			3.3	22.2	0.0		25.5	40.6	334.6	0.0	375.2
Barnaby	98	2004	9	29	7.7	11.7	15.2		5.6	19.3	41.2		17.7	28.7	4.7		51.1	268.8	513.5	91.1	873.3
Barnaby	131	1994	9	1	5.4	8.5	11.7	9.0	1.8	6.9	17.9	8.1	5.7	13.2	5.0		23.9	66.2	209.5	37.0	312.7
Barnaby	131	1995	9	1	4.4	8.4	11.6	9.8	1.0	6.7	17.8	10.6	8.2	6.3	11.9		26.4	91.7	128.7	85.8	306.1
Barnaby	131	1996	9	17	5.2	9.0		9.0	1.5	8.2		8.2	5.3	4.7	0.0		10.1	61.3	63.7	0.0	125.0
Barnaby	131	1997	8	25	5.2	8.4	12.6	8.7	1.6	6.6	22.6	7.5	7.7	14.4	3.8		25.9	90.0	218.9	29.0	337.9
Barnaby	131	1998	8	18	4.8	7.4	11.2		1.2	4.6	15.8		2.6	3.9	11.5		18.0	27.9	81.3	81.2	190.4
Barnaby	131	1999	9	1	5.2	7.7	12.5		1.6	5.2	22.1		18.7	17.7	0.0		36.4	61.3	224.6	50.1	335.9
Barnaby	131	2000	9	8	5.3	9.1	12.4		1.9	8.8	22.4		12.3	1.6	11.0		25.0	170.7	62.1	79.7	312.6
Barnaby	131	2001	9	11	5.1	9.2			1.6	9.4			3.0	10.6	0.0		13.6	35.9	161.5	0.0	197.5
Barnaby	131	2002	9	9	5.0	9.4	13.1		1.6	9.9	24.6		7.8	4.9	7.7		20.4	102.3	99.1	53.5	254.9
Barnaby	131	2003	9	26	5.6	9.5			2.0	9.6			3.0	7.1	0.0		10.1	36.1	97.6	0.0	133.7
Barnaby	131	2004	9	29	6.0		11.2		2.5		14.4		8.7	0.0	12.0		20.7	116.1	0.0	180.6	296.7
Renous	47	1970	8	10	3.9	7.8	11.0	10.3	0.7	5.4	14.9	12.4	0.2	0.8	7.2		8.2	2.4	11.4	117.5	131.2
Renous	47	1971	7	23	3.7	6.3	12.1	10.6	0.6	2.8	20.2	13.6	0.2	1.8	4.0		6.0	2.0	23.2	68.8	1.8
Renous	47	1972	7	14	3.9	7.8	9.3	8.7	0.7	5.4	9.1	7.4	0.2	1.0	1.0		2.2	2.0	13.9	15.7	31.5
Renous	47	1973	8	2	4.5	8.9		8.9	1.0	8.0		8.0	0.2	1.6	0.0		1.8	2.5	24.4	0.0	27.0
Renous	47	1974	7	19	3.1	9.2	10.8	9.5	0.3	8.8	14.3	9.6	0.9	1.1	0.3		2.3	8.7	16.8	5.4	31.0
Renous	47	1975	7	17	3.7	7.5	11.2	8.1	0.6	4.8	16.0	6.0	0.2	4.1	2.0		6.3	2.0	58.3	32.2	92.5
Renous	47	1976	8	9	5.1	7.6	11.6	8.1	1.5	4.9	17.8	6.0	3.3	3.7	1.6		8.7	40.5	52.6	27.1	120.1
Renous	47	1977	7	29	4.3	8.3	11.8	8.7	0.9	6.6	18.6	7.6	1.5	4.2	1.3		7.1	17.3	62.0	22.0	101.3
Renous	47	1978	7	11	3.6	7.2	10.9	7.9	0.5	4.2	14.7	5.5	0.6	2.3	1.5		4.3	5.7	31.2	24.8	61.7
Renous	47	1982	10	20		9.3	12.5	9.7		9.0	22.2	10.4	0.0	6.4	2.4		8.8	0.0	98.0	41.4	139.4
Renous	47	1983	10	18	6.3	9.5	12.3	10.2	2.8	9.6	21.1	11.9	4.5	1.9	1.2		7.6	59.8	28.6	20.9	109.3
Renous	47	1984	8	28	5.7	8.9		8.9	2.1	7.9		7.9	6.2	3.8	0.0		10.0	77.9	57.4	0.0	135.3
Renous	47	1993	8	30	4.4	7.8		7.8	1.0	5.4		5.4	0.8	4.1	0.0		4.9	7.6	52.8	0.0	60.4
Renous	48	1970	8	17	4.5	7.5	11.8	9.9	1.0	4.7	18.6	11.1	0.7	0.6	1.8		3.1	7.5	7.9	31.1	46.5
Renous	48	1971	7	15	3.6	8.7		8.7	0.5	7.4		7.4	0.3	1.9	0.0		2.2	3.6	28.1	0.0	31.8
Renous	48	1972	8	4	4.6	8.4		8.4	1.1	6.7		6.7	1.7	0.9	0.0		2.6	20.1	13.0	0.0	33.2
Renous	48	1973	8	10	3.9	9.2		9.2	0.7	8.7		8.7	0.6	1.2	0.0		1.8	6.1	18.5	0.0	24.6
Renous	48	1974	8	16	4.5	8.9		8.9	1.0	8.1		8.1	4.5	1.1	0.0		5.6	50.9	16.8	0.0	67.7
Renous	48	1975	8	8	4.1	7.3		7.3	0.8	4.4		4.6	2.3	3.0	0.0		5.3	25.4	42.4	0.0	67.7
Renous	48	1976	7	21	3.6	6.9	10.3	7.4	0.5	3.7	12.4	4.5	0.8	0.5	0.2		1.5	7.9	6.7	3.8	18.4
Renous	48	1977	8	29	4.5	7.9	11.8	8.2	1.0	5.6	18.6	6.1	3.0	2.1	0.4		5.5	34.6	30.1	6.2	71.0
Renous	48	1978	7	10	3.1				0.3				0.1	0.0	0.0		0.1	0.5	0.0	0.0	0.5
Renous	48	1979	7	6	3.2	6.2	11.3	6.8	0.4	2.7	16.3	3.6	0.3	0.5	0.3		1.1	2.5	7.1	5.3	14.8
Renous	48	1980	7	11	4.3	8.0	10.4	8.7	0.9	5.7	12.8	7.5	1.0	1.1	1.0		3.2	11.2	16.4	16.4	44.0
Renous	48	1981	7	24	3.7	7.5		7.5	0.6	4.7		4.7	1.3	1.2	0.0		2.5	13.6	17.0	0.0	30.6
Renous	48	1982	7	9		7.3	8.8	8.1		4.4	7.7	5.9	0.0	0.1	0.2		0.3	0.0	1.4	2.4	3.8
Renous	48	1983	7	22	4.3	8.2	11.6	9.7	0.9	6.2	17.4	10.3	0.7	0.6	1.3		2.6	7.4	9.4	21.0	37.8
Renous	48	1984	8	1	4.3	7.7		7.7	0.9	5.2		5.2	1.0	1.2	0.0		2.2	11.0	17.2	0.0	28.2
Renous	48	1985	8	9	4.2	8.4		8.4	0.8	6.7		6.7	6.3	1.0	0.0		7.3	70.3	15.1	0.0	85.4
Renous	48	1986	7	11	2.5	7.3		7.3	0.2	4.3		4.3	0.8	2.9	0.0		3.7	6.7	40.9	0.0	47.7

Appendix 2. (cont'd). Atlantic salmon mean length (cm), mean weight (g), Percent Habitat Saturation (PHS), and biomass (g per 100 m^2) by site and year sampled for 1970-2004.

River	Site	Year	Month	Day	Average Fork Length (cm)				Average Whole Weight (g)				Percent Habitat Saturation					Biomass (g per 100 m^2)			
					Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	All Parr	Tot	Age 0	Age 1	Age 2+	Total
Renous	48	1993	8	27	4.3	7.8		7.8	0.9	5.3		5.4	5.5	4.1	0.0		9.	60.6	53.0	0.0	113.6
Renous	48	1994	8	4	3.8	6.8	10.1	7.4	0.6	3.5	11.5	4.5	3.2	7.4	4.6		15.	33.1	110.7	32.4	176.3
Renous	48	1996	9	9	4.4	7.6	11.5	8.4	0.9	4.9	17.0	6.6	12.1	6.9	4.0		22.	138.2	83.2	26.3	249.6
Renous	48	1997	8	29	4.1	7.1	10.3	7.7	0.8	4.0	12.4	5.2	6.8	8.2	5.5		20.	73.9	127.3	38.6	239.9
Renous	48	1998	8	17	4.4	6.9			1.0	3.7			7.5	9.7	0.0		17.	84.5	130.2	0.0	214.6
Renous	48	1999	8	25	4.3	7.1	9.2		0.9	4.1	8.7		1.7	4.5	4.3		10.	63.5	79.0	24.5	167.1
Renous	48	2000	9	6	5.0	8.2	12.3		1.5	6.0	23.3		16.9	6.3	9.3		32.	231.4	109.7	75.2	416.4
Renous	48	2001	9	5	4.0	7.4	10.9		0.7	4.6	15.2		6.1	18.2	3.0		27.	67.4	271.5	23.3	362.2
Renous	48	2002	9	12	4.4	7.7	11.2		1.1	5.1	16.8		9.5	9.7	6.4		25.	126.5	153.1	49.2	328.7
Renous	48	2003	9	15	5.0	7.8	11.7		1.5	5.5	18.8		6.8	9.6	10.4		26.	81.9	167.7	79.7	329.3
Renous	48	2004	9	17	4.6	8.2	11.6		1.0	6.0	18.1		13.5	18.2	9.8		41.	147.1	253.7	166.2	566.9
Renous	49	1970	8	26	4.8	8.1	12.2	9.9	1.3	5.9	20.8	11.1	2.0	0.9	2.1		5.0	23.4	12.3	36.1	71.9
Renous	49	1971	8	4	4.3	9.4		9.4	0.9	9.3		9.3	1.3	1.4	0.0		2.6	14.5	20.8	0.0	35.3
Renous	49	1972	7	18	4.3	7.1	12.3	9.2	0.9	4.1	21.1	8.9	1.1	0.4	0.4		1.9	11.9	6.2	6.3	24.4
Renous	49	1973	7	23	3.4	8.6	12.3	9.1	0.4	7.2	21.1	8.4	0.7	1.0	0.4		2.1	7.4	15.2	6.4	28.9
Renous	49	1974	6	28	2.9	7.6	12.3	7.7	0.3	5.0	21.1	5.2	2.2	4.3	0.4		6.9	20.8	60.7	6.9	88.3
Renous	49	1975	7	8	3.1	7.4	10.8	7.7	0.3	4.5	14.3	5.1	2.8	2.3	0.2		5.4	27.8	31.8	4.0	63.5
Renous	49	1976	7	6	3.2	7.5	10.3	8.0	0.4	4.7	12.4	5.7	3.5	0.8	0.4		4.7	35.0	11.3	6.6	53.0
Renous	49	1977	8	16	4.6	8.7		8.7	1.1	7.5		7.5	9.2	2.7	0.0		11.	106.7	39.6	0.0	146.3
Renous	49	1978	7	25	2.6	8.7	12.6	9.1	0.2	7.5	22.8	8.5	1.5	3.9	1.1		6.5	13.2	58.4	18.4	90.1
Renous	49	1979	7	30	4.5	7.3	12.8	8.4	1.0	4.4	23.7	6.7	2.8	0.4	0.4		3.6	31.7	5.7	7.6	44.9
Renous	49	1980	9	3	5.7	9.2	12.1	9.9	2.1	8.8	20.2	11.1	7.3	1.6	1.1		10.1	92.7	25.1	19.3	137.1
Renous	49	1981	8	12	4.2	7.6	10.0	8.8	0.9	5.0	11.3	7.7	5.6	0.6	1.2		7.3	62.8	8.1	18.5	89.4
Renous	49	1982	8	4	4.2	8.2	10.1	8.5	0.8	6.3	11.5	6.9	4.5	1.7	0.5		6.7	49.6	25.4	7.1	82.2
Renous	49	1983	7	26	4.6	8.0		8.0	1.1	5.8		5.8	4.4	1.1	0.0		5.5	50.7	15.8	0.0	66.5
Renous	49	1984	7	23	3.7	6.8		6.8	0.5	3.6		3.6	2.1	0.1	0.0		2.2	21.7	1.5	0.0	23.2
Renous	49	1985	7	26	4.3	8.0	10.0	9.0	0.9	5.7	11.2	8.2	12.9	0.6	1.0		14.5	146.3	8.0	15.7	170.0
Renous	49	1986	8	13	4.2	8.2		8.2	0.8	6.2		6.2	6.9	1.4	0.0		8.3	77.2	20.8	0.0	98.0
Renous	50	1971	8	27	4.8	10.1	12.8	10.8	1.2	11.7	23.7	14.4	0.4	1.2	0.9		2.6	5.2	19.8	15.1	40.0
Renous	50	1973	8	31	4.6	8.8		8.8	1.1	7.7		7.7	0.4	0.1	0.0		0.5	4.7	2.2	0.0	6.8
Renous	50	1974	7	26	3.6	9.3		9.3	0.5	9.1		9.1	0.7	1.2	0.0		1.9	7.4	18.1	0.0	25.5
Renous	50	1975	7	22	3.9	8.3		8.3	0.6	6.4		6.8	1.0	4.2	0.0		5.2	10.7	61.6	0.0	72.3
Renous	50	1995	8	21	4.2	8.1	10.9	8.9	0.6	5.0	13.1	7.2	8.9	7.2	5.8		22.0	76.8	101.1	36.9	214.8
Renous	51	1970	8	14	4.3	7.8	11.3	10.5	0.9	5.4	16.3	13.2	0.1	0.4	4.1		4.6	1.3	6.3	67.6	75.3
Renous	51	1971	7	8	3.1				0.3				0.1	0.0	0.0		0.1	0.8	0.0	0.0	0.8
Renous	51	1973	8	14	4.7	8.8		8.8	1.2	7.7		7.7	0.3	0.2	0.0		0.5	3.0	3.0	0.0	6.0
Renous	51	1993	8	27	4.2	7.6		7.6	0.8	5.0		5.0	4.6	8.6	0.0		13.2	49.4	116.9	0.0	166.3
Renous	52	1972	8	22	5.3	9.6	14.3	10.4	1.7	10.0	33.1	12.7	0.1	1.2	0.9		2.2	1.3	19.0	16.5	36.8
Renous	52	1973	7	16	3.6		13.3	13.3	0.5		26.6	26.6	0.2	0.0	0.5		0.7	2.0	0.0	8.4	1.8
Renous	52	1974	7	10	3.8				0.6				4.7	0.0	0.0		4.7	50.4	0.0	0.0	50.4
Renous	52	1975	7	11	3.4	7.5		7.5	0.4	4.7		4.7	1.6	0.4	0.0		2.0	16.2	5.5	0.0	21.7
Renous	52	1976	7	12	3.2	7.4	11.3	8.2	0.4	4.6	16.3	6.2	0.2	0.6	0.4		1.2	2.2	7.9	7.0	17.1
Renous	52	1977	8	24	4.6	8.9	11.3	9.0	1.1	7.9	16.3	8.3	3.6	3.7	0.5		7.7	41.3	55.2	8.2	104.7
Renous	52	1978	7	11	2.5				0.2				0.0	0.0	0.0		0.0	0.3	0.0	0.0	0.3
Renous	52	1982	10	20	5.6	8.3	10.8	8.6	2.0	6.5	14.3	7.2	0.5	1.1	0.6		2.2	6.3	16.2	10.2	32.7
Renous	52	1983	10	19	5.8	9.8	11.6	11.0	2.2	10.6	17.4	14.9	2.0	0.2	0.7		3.0	26.1	3.7	12.0	41.8

Appendix 2. (cont'd). Atlantic salmon mean length (cm), mean weight (g), Percent Habitat Saturation (PHS), and biomass (g per 100 m²) by site and year sampled for 1970-2004.

					Average Fork Length (cm)				Average Whole Weight (g)				Percent Habitat Saturation					Biomass (g per 100 m²)			
River	Site	Year	Month	Day	Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	All Parr	Total	Age 0	Age 1	Age 2+	Total
Renous	52	1984	8	27	5.1		10.8	10.8	1.5		14.3	14.3	3.4	0.0	0.3		3.7	40.7	0.0	5.2	45.9
Renous	52	1993	8	30	4.6	8.1		8.1	1.1	5.9		6.0	1.1	5.5	0.0		6.5	11.1	72.5	0.0	83.6
Renous	52	1994	8	12	4.4	7.3		7.3	0.9	4.3		4.3	3.4	6.3	0.0		9.7	36.5	82.3	0.0	118.7
Renous	52	1997	8	29	4.5	7.6		7.6	1.0	5.0		5.0	4.7	7.2	0.0		11.9	51.4	96.4	0.0	147.8
Renous	52	1998	8	17	4.3	6.6			0.9	3.3			2.9	3.0	0.0		6.0	31.3	36.9	0.0	68.2
Renous	52	1999	8	25	4.3	7.5	10.2		0.9	4.7	11.9		4.6	9.0	1.5		15.2	16.9	87.5	38.7	143.1
Renous	52	2000	9	7	5.2	8.6	12.8		1.7	7.3	24.6		5.5	2.6	10.8		18.9	68.5	64.6	79.9	213.1
Renous	52	2001	9	13	4.2	7.7	10.4		0.8	5.2	11.9		3.3	11.3	3.7		18.3	34.2	170.6	24.3	229.0
Renous	52	2002	9	23	4.4	7.4	11.7		0.8	4.2	15.7		6.8	6.6	8.6		22.0	67.2	97.9	53.9	219.1
Renous	52	2003	9	15	4.9	8.0	12.7		1.2	5.8	20.0		0.9	5.6	3.2		9.6	8.2	83.1	19.7	111.0
Renous	53	1973	8	17	4.3	7.3	11.6	9.3	0.9	4.3	17.8	9.1	1.9	1.4	2.0		5.3	21.0	19.3	34.1	74.4
Renous	53	1974	7	29	4.0	9.1	13.3	9.3	0.7	8.5	26.6	9.1	2.5	4.0	0.6		7.0	27.2	60.6	10.0	97.7
Renous	53	1975	8	7	4.2	7.6	11.5	8.0	0.8	4.9	17.2	5.8	2.2	5.6	1.8		9.7	24.8	79.7	30.1	134.6
Renous	53	1976	9	8	5.6	8.0	10.4	8.4	1.9	5.8	12.8	6.6	4.3	4.7	1.5		10.6	53.9	68.7	24.2	146.8
Renous	53	1977	8	5	4.2	7.8	10.2	8.6	0.8	5.4	12.1	7.1	2.9	5.0	4.6		12.6	32.4	72.2	73.6	178.1
Renous	53	1978	7	19	2.8	8.1	11.6	8.5	0.2	6.0	17.8	7.0	0.3	4.0	1.5		5.8	2.9	58.2	24.8	85.8
Renous	53	1979	7	31	4.5	7.2	10.3	7.7	1.0	4.2	12.4	5.1	0.2	0.6	0.3		1.2	2.8	9.0	4.4	16.2
Renous	53	1980	9	10	6.0	9.1	12.0	10.8	2.4	8.4	19.4	14.3	3.7	0.4	1.2		5.2	47.4	5.8	20.0	73.2
Renous	53	1981	7	30	3.9	8.3		8.3	0.7	6.3		6.4	1.0	1.6	0.0		2.6	10.6	24.1	0.0	34.7
Renous	53	1982	7	14	3.4	8.0	11.8	8.7	0.4	5.7	16.6	7.4	0.4	1.2	0.7		2.3	3.6	17.2	12.4	33.3
Renous	53	1983	7	11	3.9	8.4	11.0	9.1	0.7	6.8	15.0	8.5	0.3	4.1	2.8		7.2	3.7	59.8	46.1	109.7
Renous	53	1984	7	23	4.3	9.0	12.3	9.4	0.9	8.2	21.1	9.5	1.2	1.2	0.4		2.8	13.4	17.8	7.7	38.9
Renous	53	1993	8	30	5.0	7.9		7.9	1.4	5.6		5.6	5.3	2.2	0.0		7.6	60.8	27.8	0.0	88.6
Renous	54	1970	8	24		8.6	10.8	10.3		7.3	14.3	12.2	0.0	0.7	3.5		4.2	0.0	9.7	57.3	67.1
Renous	54	1994	8	4	4.3	7.3	10.6	7.6	0.8	4.0	12.0	4.4	2.8	4.0	0.8		7.6	27.9	49.8	11.6	89.4
Renous	54	1995	8	22	4.2	7.4	10.7	7.7	0.8	4.6	13.8	5.1	8.8	8.1	2.0		18.9	98.0	113.4	32.0	243.5
Renous	54	1996	9	9	5.2	8.3	12.3	9.4	1.6	6.5	21.1	9.4	10.7	9.1	2.2		21.9	127.8	132.8	15.9	276.4
Renous	54	1997	8	29	4.7	7.6		7.6	1.2	4.9		4.9	7.2	10.7	0.0		17.9	82.3	147.7	0.0	230.0
Renous	54	1998	8	17	4.3	7.2	10.6		0.9	4.3	13.5		5.5	12.7	2.0		20.2	60.9	181.8	14.6	257.3
Renous	54	1999	9	15	4.4	7.3	12.7		1.0	4.4	23.2		10.0	10.6	3.5		24.1	56.1	119.5	20.8	196.4
Renous	54	2000	9	6	5.1	8.1	11.7		1.6	6.2	18.6		11.0	6.9	16.4		34.3	138.7	154.1	124.8	417.6
Renous	54	2001	9	5	4.6	7.7	10.4		1.1	5.4	13.1		6.9	9.5	3.7		20.1	83.1	150.5	26.5	260.0
Renous	54	2002	9	23	5.2	7.9	11.4		1.5	5.5	15.7		16.3	6.6	11.7		34.6	188.8	127.2	78.4	394.3
Renous	116	1994	8	12	4.6	7.7	9.9	8.0	1.1	5.2	11.0	5.7	2.3	6.0	1.4		9.7	24.8	85.6	9.5	119.8
Renous	116	1995	8	21	3.9	7.5		7.5	0.6	4.5		4.5	4.0	3.2	0.0		7.2	36.7	37.7	0.0	74.5
Renous	116	1996	9	9	5.0	8.1		8.1	1.4	5.9		5.9	5.9	5.1	0.0		11.0	67.7	67.1	0.0	134.8
Renous	116	2004	9	17	6.0	9.4	12.2		2.6	9.5	19.9		4.2	24.0	29.6		57.8	57.7	371.8	484.7	914.3
Renous	156	1988	8	22	4.5			10.3	1.0			12.4	4.0			18.3	22.3	46.0			338.4
Renous	199	1998	8	17	4.4	7.8	10.9		0.9	5.3	14.7		8.5	12.1	2.7		23.2	95.1	178.2	19.3	292.6
Renous	209	2002	10	1	4.9				1.2				7.3	0.0	0.0		7.3	81.9	0.0	0.0	81.9
Renous	214	1988	8	23	5.0			11.1	1.4			15.3	2.9			1.3	4.1	34.2			54.8
Renous	214	1994	8	12	4.7	9.5	12.2	10.5	1.2	9.8	20.4	13.2	4.4	5.9	6.7		17.1	49.1	113.1	47.5	209.7
Renous	214	1996	9	9		9.5	12.4	12.0		9.7	21.4	19.8	0.0	14.5	6.7		21.3	0.0	246.0	50.4	296.4
Renous	214	1997	8	29	5.7				2.1				6.3	0.0	0.0		6.3	74.5	0.0	0.0	74.5
Renous	214	1998	8	17	5.0	9.1	11.3		1.4	8.4	16.3		4.8	4.6	4.1		13.5	53.9	81.2	27.7	162.8
Renous	214	1999	8	28	5.4	9.3	13.0		1.7	9.1	24.6		5.3	6.3	9.9		21.5	62.0	122.6	72.5	257.2

Appendix 2. (cont'd). Atlantic salmon mean length (cm), mean weight (g), Percent Habitat Saturation (PHS), and biomass (g per 100 m²) by site and year sampled for 1970-2004.

River	Site	Year	Month	Day	Average Fork Length (cm)				Average Whole Weight (g)				Percent Habitat Saturation					Biomass (g per 100 m²)			
					Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	All Parr	Total	Age 0	Age 1	Age 2+	Total
Renous	214	2000	9	6	5.4		10.7		2.1		18.6		11.0	0.0	14.3		25.3	165.6	0.0	128.7	325.7
Renous	214	2001	8	30	5.0	9.2	13.0		1.5	10.2	24.6		0.5	12.3	2.7		15.5	5.9	214.6	20.2	240.6
Renous	214	2002	9	23		8.7	13.4			7.9	26.2		0.0	2.0	12.0		14.0	0.0	59.2	83.5	142.7
Renous	214	2003	9	15			12.9				33.1		0.0	0.0	23.3		23.3	0.0	0.0	230.7	358.3
Renous	214	2004	9	17	6.6	8.1			3.3	5.9			9.1	6.2	0.0		15.3	123.4	88.6	0.0	212.0
Dungarvon	54	2003	9	15	4.8	7.9	11.8		1.2	5.7	18.1		4.8	8.9	5.0		18.7	53.3	139.0	35.8	228.1
Dungarvon	54	2004	9	17	5.2	8.1	11.4		1.5	5.9	17.7		15.7	5.7	16.0		37.4	186.8	81.9	281.3	549.9
Dungarvon	55	1974	9	6	5.6	9.0		9.0	1.9	8.2		8.2	3.4	4.3	0.0		7.7	42.6	65.1	0.0	107.8
Dungarvon	55	1975	8	20	4.3	7.1	10.6	8.0	0.9	4.0	13.6	5.8	2.2	3.2	3.1		8.5	25.0	44.3	50.0	119.3
Dungarvon	55	1977	8	25	3.2	8.2	10.5	6.9	0.3	6.2	12.9	3.7	2.2	3.5	3.7		9.4	22.1	50.7	58.6	131.4
Dungarvon	55	1978	8	1	3.8	6.9		6.9	0.6	3.6		3.6	3.1	3.1	0.0		6.2	33.1	42.5	0.0	75.6
Dungarvon	55	1979	7	13									0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dungarvon	55	1980	7	8	4.6	6.8	10.3	9.4	1.1	3.6	12.4	9.5	0.6	0.1	1.0		1.7	6.8	1.5	15.9	24.1
Dungarvon	55	1981	7	13	3.1	8.1		8.1	0.3	5.9		5.9	0.3	0.7	0.0		1.0	3.2	10.3	0.0	13.4
Dungarvon	55	1982	7	12	3.6	7.3		7.3	0.5	4.4		4.4	0.0	0.1	0.0		0.2	0.4	2.1	0.0	2.5
Dungarvon	55	1983	7	25	4.6	8.5	10.6	9.0	1.1	7.0	13.3	8.2	1.5	1.1	0.5		3.2	17.6	16.1	8.8	42.4
Dungarvon	55	1984	7	27	4.0	7.3		7.3	0.7	4.4		4.4	0.2	1.8	0.0		2.0	2.0	24.8	0.0	26.8
Dungarvon	55	1993	8	31	4.8	7.3	10.5	8.5	1.2	4.3	13.2	6.9	4.3	5.4	8.5		18.2	47.7	96.2	59.6	203.5
Dungarvon	55	1994	8	16	4.7	7.4		7.4	1.2	4.5		4.5	8.8	9.1	0.0		17.9	100.9	123.2	0.0	224.1
Dungarvon	55	1995	8	30	4.0	7.3	10.8	7.9	0.7	4.4	14.1	5.5	7.1	8.7	4.7		20.5	77.0	121.8	75.7	274.6
Dungarvon	55	1996	9	5	4.7	7.3		7.3	1.2	4.5		4.5	7.7	2.1	0.0		9.8	89.9	30.0		119.9
Dungarvon	55	1997	9	16	4.5	7.1	10.0	7.4	1.0	4.0	11.4	4.7	5.2	11.0	3.3		19.5	59.6	151.7	52.2	263.4
Dungarvon	55	1998	8	19	4.6	7.0	10.1		1.1	3.9	11.8		3.9	8.5	3.6		16.0	45.1	116.6	57.4	219.1
Dungarvon	55	1999	8	26	4.2	7.5	9.8		0.8	4.7	10.8		7.0	3.7	1.3		12.0	78.6	52.1	19.9	150.6
Dungarvon	55	2000	8	29	4.7	7.5	10.0		1.2	4.8	14.3		5.8	5.5	4.3		15.7	69.5	89.1	36.9	195.5
Dungarvon	55	2001	9	4	4.3	7.4	10.3		0.9	4.7	13.3		3.0	12.0	6.5		21.5	32.8	193.9	49.9	276.6
Dungarvon	55	2002	9	17	4.8	7.8	10.8		1.2	5.2	14.7		6.9	6.4	5.0		18.2	78.4	99.3	35.7	213.4
Dungarvon	55	2003	9	16	4.5	7.4			1.1	4.4			1.8	4.9	0.0		6.8	20.3	61.6	0.0	82.0
Dungarvon	55	2004	9	15	5.1	7.6	10.6		1.4	4.6	13.7		8.0	7.9	17.0		32.9	93.2	103.4	280.2	476.8
Dungarvon	56	1974	9	9	5.1	9.2		9.2	1.5	8.7		8.7	5.3	0.8	0.0		6.1	63.7	12.3	0.0	76.0
Dungarvon	56	1975	8	29	4.5	7.1		7.1	1.0	4.1		4.2	4.6	1.5	0.0		6.1	52.7	20.9	0.0	73.6
Dungarvon	56	1976	8	25	5.3	7.6		7.6	1.7	4.9		4.9	3.3	0.2	0.0		3.6	40.6	3.5	0.0	44.1
Dungarvon	56	1977	8	18	4.7	7.7	11.1	8.5	1.2	5.2	15.6	6.9	4.4	1.5	1.2		7.1	51.4	21.4	19.4	92.2
Dungarvon	56	1978	7	13	2.7	8.1	11.1	8.5	0.2	6.1	15.3	6.9	0.4	2.2	0.6		3.3	3.6	32.6	10.2	46.4
Dungarvon	56	1979	7	19	3.8	6.8		6.8	0.6	3.6		3.6	0.5	0.1	0.0		0.6	5.9	1.2	0.0	7.1
Dungarvon	56	1982	9	28	5.4				1.8				0.3	0.0	0.0		0.3	3.8	0.0	0.0	3.8
Dungarvon	56	1983	8	17	5.3				1.7				0.1	0.0	0.0		0.1	1.5	0.0	0.0	1.5
Dungarvon	56	1984	7	26	4.3	7.3		7.3	0.9	4.4		4.4	0.6	0.1	0.0		0.7	6.3	2.1	0.0	8.4
Dungarvon	56	1993	8	31	4.6	7.3	9.7	8.1	1.1	4.3	10.3	6.0	4.8	8.3	7.8		20.9	53.2	142.2	54.2	249.5
Dungarvon	57	1974	9	10	5.4	9.8		9.8	1.8	10.6		10.6	9.4	4.1	0.0		13.5	116.6	64.8	0.0	181.4
Dungarvon	57	1975	8	22	4.7	8.0	10.1	8.4	1.2	5.8	11.8	6.7	4.4	1.6	0.7		6.7	51.8	23.1	10.9	85.8
Dungarvon	57	1976	8	25	5.1	7.2		7.2	1.5	4.2		4.8	1.4	1.4	0.0		2.8	17.4	19.0	0.0	36.4
Dungarvon	57	1977	8	17	4.7	8.6	10.8	9.0	1.2	7.2	14.3	8.2	4.4	0.7	0.2		5.4	51.9	10.2	4.1	66.2
Dungarvon	57	1978	7	13	3.4	6.6	9.6	7.0	0.4	3.2	10.1	3.8	0.9	1.3	0.5		2.7	9.4	17.0	8.5	34.9
Dungarvon	57	1979	7	18	3.6				0.5				0.2	0.0	0.0		0.2	2.0	0.0	0.0	2.0
Dungarvon	57	1980	7	29	5.0		9.8	9.8	1.4		10.6	10.6	1.0	0.0	1.0		2.0	12.1	0.0	15.2	10.8

Appendix 2. (cont'd). Atlantic salmon mean length (cm), mean weight (g), Percent Habitat Saturation (PHS), and biomass (g per 100 m²) by site and year sampled for 1970-2004.

					Average Fork Length (cm)				Average Whole Weight (g)				Percent Habitat Saturation					Biomass (g per 100 m²)			
River	Site	Year	Month	Day	Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	All Parr	Total	Age 0	Age 1	Age 2+	Total
Dungarvon	57	1981	8	17	4.5		9.8	9.8	1.0		10.6	10.6	2.6	0.0	1.1		3.7	30.1	0.0	16.5	26.8
Dungarvon	57	1982	8	3	4.2	7.6	9.8	8.8	0.9	4.9	10.6	7.7	1.0	0.4	1.0		2.4	11.0	5.9	16.0	32.9
Dungarvon	57	1983	8	3	4.8	8.3		8.3	1.3	6.5		6.5	1.9	0.2	0.0		2.0	22.2	2.4	0.0	24.6
Dungarvon	57	1984	7	26	4.4	7.8	10.3	8.4	1.0	5.4	12.4	6.8	0.9	0.4	0.3		1.5	9.8	5.3	4.1	19.3
Dungarvon	57	1993	8	31	4.6	7.0		7.0	1.1	3.9		3.9	5.7	3.4	0.0		9.1	63.4	42.8	0.0	106.1
Dungarvon	57	1994	8	16	4.7	7.6	10.2	8.7	1.2	5.0	12.0	7.3	3.9	4.6	6.6		15.1	43.3	84.9	44.7	172.9
Dungarvon	57	1996	9	5	4.6	6.0		6.0	1.1	2.4		2.4	9.5	1.1	0.0		10.6	108.5	13.5		110.1
Dungarvon	57	1997	9	15	4.8	7.2	11.2	7.5	1.3	4.3	15.9	4.7	7.1	13.2	1.7		22.0	81.0	188.6	12.8	282.4
Dungarvon	57	1998	8	18	4.3	6.8			0.9	3.6			7.0	7.0	0.0		14.0	77.7	91.6	0.0	169.3
Dungarvon	57	1999	8	25	4.4	7.4	11.4		1.0	4.5	16.8		11.0	10.4	8.2		29.6	113.7	156.2	19.2	289.1
Dungarvon	57	2000	8	2	4.6				1.2				3.8	0.0	0.0		3.8	47.5	0.0	0.0	47.5
Dungarvon	57	2001	9	5	4.8	8.1	10.9		1.3	6.5	13.1		10.5	6.5	2.0		19.0	135.9	101.7	12.2	249.9
Dungarvon	57	2002	9	20	4.7	8.3	12.7		1.1	6.6	22.2		9.6	8.9	2.7		21.2	109.5	132.1	18.8	260.4
Dungarvon	57	2003	9	16	5.0	7.9	10.0		1.4	5.8	11.4		4.0	9.5	1.3		14.8	45.8	141.3	8.6	195.7
Dungarvon	57	2004	9	20	5.2	7.9	11.2		1.6	5.5	14.4		6.7	6.5	2.3		15.5	80.1	92.3	34.8	207.1
Dungarvon	58	2004	9	21	5.2	8.2	11.2		1.5	6.4	15.7		8.2	11.8	6.1		26.0	96.8	175.2	99.0	371.0
Dungarvon	117	1994	8	16	4.9	7.7	10.3	7.9	1.3	5.2	12.4	5.6	7.8	10.0	1.4		19.2	89.3	144.2	9.8	243.4
Dungarvon	117	1995	8	21	4.7	8.4	11.8	9.0	1.2	8.3	17.0	8.5	13.9	13.5	8.2		35.6	166.2	214.3	56.5	436.9
Dungarvon	117	1996	9	9	5.1	8.9	11.7	9.6	1.5	8.0	18.1	10.0	13.9	11.8	8.0		33.7	167.0	204.0	58.7	429.7
Dungarvon	117	1997	9	15	5.5	7.8	10.1	8.0	1.9	5.0	11.8	5.8	11.3	21.3	4.5		37.1	138.1	330.0	32.5	500.6
Dungarvon	117	1998	8	17	4.7	7.7	10.0		1.2	5.1	11.3		9.0	7.2	2.4		18.6	104.0	106.7	16.3	227.0
Dungarvon	117	1999	8	25	4.7	8.2	11.3		1.2	6.3	16.3		12.3	10.2	3.9		26.4	62.4	301.0	34.9	398.3
Dungarvon	117	2000	8	2	4.7	8.1	11.3		1.4	6.4	16.6		10.9	12.6	21.7		45.2	150.8	277.3	166.4	594.6
Dungarvon	117	2001	9	5	5.2	8.0	9.7		1.6	5.7	9.6		12.0	14.3	1.1		27.4	144.7	209.0	6.9	360.6
Dungarvon	117	2002	9	13	5.2	8.7	10.7		1.6	7.5	12.8		16.4	8.9	7.6		33.0	206.6	163.7	49.1	419.4
Dungarvon	117	2003	9	22	5.4	8.3	11.2		1.9	6.6	15.9		6.0	17.4	9.1		32.5	77.2	296.2	66.8	440.2
Dungarvon	117	2004	9	20	6.0	9.0	12.0		2.5	7.9	19.5		6.2	10.9	28.9		46.0	79.7	154.2	493.2	727.2
Dungarvon	123	1994	8	22		9.9	12.6	12.0		11.0	22.4	19.7	0.0	2.8	20.8		23.6	0.0	132.8	151.9	284.7
Dungarvon	186	1997	9	24	5.1	8.6	12.7	10.1	1.5	7.1	23.2	11.7	9.2	7.8	12.9		29.9	109.2	147.5	97.0	353.7
Dungarvon	186	1998	8	11		8.1	12.0			6.0	19.7		0.0	9.8	10.3		20.0	0.0	167.6	76.5	244.1
Dungarvon	186	1999	8	28	5.2		11.1		1.6		15.5		7.7	0.0	11.4		19.1	160.8	0.0	187.2	348.0
Dungarvon	186	2000	9	7	4.8	8.8	10.6		1.3	8.4	25.2		16.4	17.6	7.4		41.4	202.4	332.3	100.6	635.3
Dungarvon	186	2001	8	30	5.2	7.8	11.0		1.8	5.8	16.9		8.9	18.3	8.8		36.0	118.7	318.0	74.2	510.8
Dungarvon	186	2002	9	23		8.9	11.3			7.8	16.8		0.0	9.4	20.3		29.7	0.0	222.8	151.3	374.2
Dungarvon	186	2003	9	15	5.7	9.1	11.3		2.2	8.7	19.0		4.3	7.2	22.0		33.5	53.3	216.2	186.5	456.1
Dungarvon	186	2004	9	7	5.2	9.3	12.4		1.6	9.2	21.1		10.7	5.3	22.9		38.9	134.9	84.0	385.2	604.1
Dungarvon	188	1997	8	27	4.7	8.2	12.0	9.5	1.1	6.1	19.4	9.8	21.5	15.5	13.5		50.5	257.9	268.3	103.0	629.3
Dungarvon	210	1996	9	5	4.8	7.9	11.4	8.4	1.3	5.6	16.5	6.8	15.2	10.1	10.4		35.8	181.4	175.6	76.4	433.4
Dungarvon	210	1997	9	17	4.8	7.6	11.6	8.3	1.2	4.9	17.7	6.4	8.4	15.1	8.1		31.5	96.2	237.7	61.0	394.9
Dungarvon	210	1998	8	11	4.5	7.1	9.8		1.0	4.0	10.5		5.1	9.7	7.4		22.2	55.9	159.3	52.1	267.3
Dungarvon	210	1999	8	31	4.7	7.5	10.4		1.2	4.8	12.9		10.6	20.3	14.5		45.3	123.0	348.1	107.7	578.8
Dungarvon	210	2000	8	3	4.1	7.2	10.5		0.7	4.5	13.2		4.9	11.9	10.3		27.2	51.4	211.6	74.6	337.6
Dungarvon	210	2001	9	4	4.6	7.2	10.7		1.1	4.5	14.4		7.0	14.9	8.3		30.1	84.6	247.0	63.7	395.4
Dungarvon	210	2002	9	17	4.5	7.3	10.3		1.0	4.3	12.5		8.6	6.9	14.8		30.3	98.2	137.2	105.1	340.6
Dungarvon	210	2003	9	11	4.7	7.1	11.1		1.1	4.2	15.8		3.9	12.3	2.7		18.9	43.3	181.3	20.1	244.6
Dungarvon	210	2004	9	15	4.9	7.6	10.2		1.3	4.7	11.3		9.8	17.8	15.0		42.6	109.7	240.4	222.7	572.8

Appendix 2. (cont'd). Atlantic salmon mean length (cm), mean weight (g), Percent Habitat Saturation (PHS), and biomass (g per 100 m²) by site and year sampled for 1970-2004.

River	Site	Year	Month	Day	Average Fork Length (cm)				Average Whole Weight (g)				Percent Habitat Saturation					Biomass (g per 100 m²)			
					Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	All Parr	Total	Age 0	Age 1	Age 2+	Total
SW Miramichi	58	1970	7	28	3.9	8.2	11.5	9.8	0.7	6.1	17.0	10.6	1.5	0.8	2.0		4.3	15.7	12.2	33.9	61.8
SW Miramichi	58	1971	7	27	3.5	8.4	11.9	8.9	0.5	6.6	19.1	7.9	1.8	4.9	1.0		7.7	18.3	71.5	17.4	107.2
SW Miramichi	58	1972	8	2	4.8	8.4	12.4	9.8	1.2	6.7	21.8	10.6	0.3	2.8	3.2		6.3	3.4	41.8	54.9	100.0
SW Miramichi	58	1973	8	27	4.4	9.7	12.3	10.1	0.9	10.2	21.1	11.5	4.0	3.0	1.0		8.0	45.6	46.6	17.0	109.1
SW Miramichi	58	1974	8	15	5.2	9.5	13.3	9.6	1.6	9.8	26.6	10.0	2.9	9.0	0.5		12.4	34.9	140.1	8.1	183.1
SW Miramichi	58	1975	8	1	3.8	7.2	11.4	8.5	0.6	4.2	16.6	6.9	3.0	7.2	10.0		20.2	31.9	99.9	166.2	298.1
SW Miramichi	58	1976	7	26	4.2	7.1	10.6	7.7	0.9	4.1	13.6	5.2	1.8	4.5	2.6		8.9	20.2	62.1	42.6	124.8
SW Miramichi	58	1977	8	10	3.7	8.3	11.3	9.1	0.6	6.5	16.3	8.5	10.1	5.6	4.4		20.1	107.3	82.3	72.7	262.3
SW Miramichi	58	1978	8	21	3.6	7.6		7.6	0.5	4.9		4.9	1.2	3.1	0.0		4.3	12.9	43.2	0.0	56.1
SW Miramichi	58	1982	10	19	5.9	8.6	10.8	9.9	2.3	7.2	14.1	11.0	7.7	2.7	2.3		12.6	98.2	39.7	37.1	175.0
SW Miramichi	58	1983	10	26	5.9		12.8	12.8	2.3		23.7	23.7	22.8	0.0	0.4		23.3	292.4	0.0	7.5	259.1
SW Miramichi	58	1984	9	6	5.3	9.8	11.5	10.9	1.6	10.6	17.2	14.5	13.7	2.3	3.6		19.6	167.8	36.7	59.3	263.9
SW Miramichi	58	1985	9	10	5.8	10.1	12.0	8.7	2.2	11.6	19.4	7.5	15.6	6.0	2.6		24.2	198.8	95.1	43.5	337.4
SW Miramichi	58	1993	9	9	5.0	8.0	10.6	8.4	1.4	5.7	13.5	6.7	13.6	10.5	2.8		26.9	162.2	158.0	19.5	339.8
SW Miramichi	58	1994	8	18	4.7	7.9	10.8	8.3	1.1	5.6	14.4	6.5	9.5	20.2	6.9		36.6	109.6	323.2	51.0	483.8
SW Miramichi	58	1996	9	11	5.0	7.6	11.2	7.9	1.4	5.0	15.8	5.6	22.5	23.4	14.5		60.4	276.2	392.2	111.5	779.9
SW Miramichi	58	1997	9	18	5.1	7.6	11.7	8.2	1.5	4.9	17.9	6.3	12.0	14.8	6.5		33.3	143.7	227.4	49.4	420.5
SW Miramichi	58	1998	8	27	4.8	7.4	9.5		1.3	4.5	9.6		9.4	8.8	5.1		23.3	109.3	140.8	34.8	284.9
SW Miramichi	58	1999	8	31	4.4	8.1	10.5		1.0	5.9	13.0		4.7	32.3	11.9		49.0	127.6	216.4	46.9	391.0
SW Miramichi	58	2000	8	10	4.3	7.6	10.6		1.0	5.2	13.6		7.8	11.4	9.6		28.8	98.9	201.1	69.2	369.2
SW Miramichi	58	2001	9	4	4.3	8.0	10.3		1.0	6.1	12.2		9.0	11.9	1.3		22.2	109.6	181.3	8.8	299.8
SW Miramichi	58	2002	9	11	4.8	9.1	11.3		1.3	8.6	17.3		18.0	14.0	13.0		45.0	222.7	274.8	100.9	598.4
SW Miramichi	58	2003	9	22	5.2	8.6	12.7		1.6	7.2	24.8		8.6	16.6	2.2		27.4	104.8	248.9	17.6	371.3
SW Miramichi	59	1970	7	29	4.3	8.6	13.2	10.9	0.9	7.2	26.1	14.6	0.8	2.5	16.5		19.8	9.3	37.4	289.5	336.3
SW Miramichi	59	1971	8	5	4.1	9.4	12.8	10.3	0.8	9.4	23.5	12.5	0.8	5.3	4.6		10.6	8.3	81.1	79.8	169.3
SW Miramichi	59	1972	7	24	4.2	9.2	11.9	10.0	0.8	8.7	18.9	11.2	0.2	3.5	2.9		6.6	2.1	53.9	49.2	105.2
SW Miramichi	59	1973	7	30	4.7	8.9	11.8	9.6	1.2	8.1	18.6	9.9	1.0	1.1	0.6		2.7	11.5	16.4	10.8	38.8
SW Miramichi	59	1974	9	5	5.1	9.6	12.6	10.0	1.5	10.1	22.4	11.4	4.1	9.8	1.7		15.5	49.2	151.7	28.5	229.5
SW Miramichi	59	1975	9	4	5.0	7.7	11.4	8.3	1.4	5.1	16.7	6.5	8.0	19.0	8.1		35.1	95.8	270.0	134.9	500.7
SW Miramichi	59	1977	8	29	4.9	9.3	12.1	9.7	1.3	9.0	19.8	10.3	6.7	11.3	4.1		22.1	79.9	172.8	69.4	322.1
SW Miramichi	59	1978	8	17	4.3	7.8	10.3	8.0	0.9	5.3	12.4	5.8	2.1	5.1	0.3		7.5	23.9	72.5	4.6	100.9
SW Miramichi	59	1979	9	18	5.8		12.8	12.8	2.1		23.7	23.7	1.0	0.0	0.6		1.6	12.6	0.0	10.7	11.2
SW Miramichi	59	1980	9	11	5.9	9.3	10.4	9.8	2.3	9.1	12.8	10.6	9.6	1.3	1.4		12.3	123.6	19.5	22.0	165.1
SW Miramichi	59	1982	9	28	4.6	9.9		9.1	1.1	11.0		8.7	1.3	3.1	0.0		4.3	14.8	48.4	0.0	63.1
SW Miramichi	59	1983	9	6	5.7	9.0	11.7	10.1	2.1	8.2	18.0	11.5	5.0	0.8	1.7		7.5	62.9	12.8	28.2	103.9
SW Miramichi	59	1984	8	21	5.1	8.3	10.8	9.2	1.5	8.3	14.3	8.7	3.3	1.7	1.9		6.9	40.2	24.7	30.3	95.3
SW Miramichi	59	1993	9	2	5.3	9.0	11.5	10.3	1.7	8.2	17.2	12.4	7.5	3.0	5.6		16.1	88.3	62.9	37.8	189.0
SW Miramichi	60	1970	7	30	3.3		13.3	13.3	0.4		26.6	26.6	0.0	0.0	2.0		2.0	0.2	0.0	34.5	34.6
SW Miramichi	60	1971	7	20	3.7	8.4		8.4	0.6	6.8		6.8	1.2	1.4	0.0		2.6	12.4	20.4	0.0	32.8
SW Miramichi	60	1972	7	27	4.4	8.6	12.6	9.6	1.0	7.1	22.4	9.9	0.5	0.9	1.5		2.9	5.2	13.7	26.1	45.1
SW Miramichi	60	1973	8	1	4.3	10.3		10.3	0.9	12.4		12.4	1.9	0.3	0.0		2.2	21.7	5.1	0.0	26.8
SW Miramichi	60	1974	7	3	2.9	7.7		7.7	0.3	5.2		5.2	1.6	1.0	0.0		2.6	15.6	13.8	0.0	29.4
SW Miramichi	60	1975	7	9	3.1	7.2	11.8	7.4	0.3	4.2	18.6	4.6	2.1	4.3	0.8		7.2	20.8	59.8	13.5	94.0
SW Miramichi	60	1976	7	5	3.2	6.9	11.0	7.6	0.4	3.7	14.9	5.0	0.9	1.2	0.8		2.9	9.1	16.0	13.7	38.9
SW Miramichi	60	1977	7	27	3.8	7.9	11.8	8.4	0.6	5.5	18.6	6.6	2.6	0.8	0.3		3.7	27.5	11.5	5.5	44.5
SW Miramichi	60	1978	8	10	4.2				0.8				0.3	0.0	0.0		0.3	2.8	0.0	0.0	2.8

Appendix 2. (cont'd). Atlantic salmon mean length (cm), mean weight (g), Percent Habitat Saturation (PHS), and biomass (g per 100 m²) by site and year sampled for 1970-2004.

					Average Fork Length (cm)				Average Whole Weight (g)				Percent Habitat Saturation					Biomass (g per 100 m²)			
River	Site	Year	Month	Day	Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	All Parr	Total	Age 0	Age 1	Age 2+	Total
SW Miramichi	60	1979	8	3	4.8	8.1	11.6	9.6	1.3	6.1	17.4	9.9	0.5	0.4	0.9		1.8	5.6	5.4	15.6	26.7
SW Miramichi	60	1980	8	21	5.8	8.8		8.8	2.2	7.7		7.7	1.2	0.2	0.0		1.4	15.8	3.0	0.0	18.8
SW Miramichi	60	1981	8	5	4.5	8.3	9.8	8.6	1.1	6.5	10.6	7.2	3.6	0.5	0.2		4.4	41.7	7.8	3.2	52.7
SW Miramichi	60	1982	8	6	5.3	8.5	10.2		1.7	6.9	12.0		1.4	1.1	1.1		3.5	17.1	15.8	17.2	50.1
SW Miramichi	60	1983	8	11	5.5				1.9				2.5	0.0	0.0		2.5	31.0	0.0	0.0	31.0
SW Miramichi	60	1984	8	16	4.7	8.0		8.0	1.2	5.7		5.7	1.6	0.4	0.0		2.0	18.2	6.5	0.0	24.6
SW Miramichi	60	1985	8	15	5.4	9.4	11.6	10.0	1.8	9.4	17.4	11.4	6.5	1.2	0.8		8.4	79.7	17.8	13.2	110.7
SW Miramichi	60	1986	8	15	5.0	8.6	11.1	9.8	1.4	7.1	15.3	10.6	2.6	0.4	0.7		3.7	30.9	5.7	12.3	48.9
SW Miramichi	60	1987	7	14	3.9	6.9		6.9	0.7	3.7		3.7	2.4	0.7	0.0		3.1	26.4	9.0	0.0	35.4
SW Miramichi	60	1988	7	13	3.8	7.8		7.8	0.6	5.4		5.4	4.7	0.2	0.0		4.9	50.0	3.0	0.0	53.0
SW Miramichi	60	1989	7	19	3.7	6.9		6.9	0.6	3.8		3.8	8.2	1.1	0.0		9.3	86.8	14.8	0.0	101.6
SW Miramichi	60	1990	7	17	3.9	8.2		8.2	0.7	6.3		6.3	7.7	1.7	0.0		9.4	82.8	24.8	0.0	107.6
SW Miramichi	60	1992	7	22	3.8	7.5	11.1	8.0	0.6	4.7	15.6	5.9	2.7	5.1	2.7		10.5	28.9	71.0	44.3	144.3
SW Miramichi	60	1993	7	23	4.2	7.6		7.6	0.8	4.9		5.0	8.8	2.0	0.0		10.8	98.2	28.5	0.0	126.7
SW Miramichi	60	1994	8	25	5.2	7.9	10.8	9.2	1.6	5.6	14.2	8.9	5.8	2.4	4.5		12.8	71.2	35.0	73.1	179.2
SW Miramichi	60	1995	8	17	4.5	7.7	10.2	7.9	1.0	4.8	11.4	5.4	7.2	6.1	1.3		14.6	77.9	82.1	8.3	168.3
SW Miramichi	60	1996	9	11	4.6	7.7	10.4	8.1	1.1	5.2	12.7	5.9	12.2	7.4	0.0		19.5	141.4	99.1	0.0	240.5
SW Miramichi	60	1997	9	18	5.1	7.9		7.9	1.5	5.5		5.5	16.4	17.5	0.0		33.9	199.7	252.3	0.0	452.0
SW Miramichi	60	1998	8	27	4.6	7.9			1.1	5.5			9.0	36.6	0.0		45.6	103.4	54.3	0.0	157.7
SW Miramichi	60	1999	8	31	4.8	7.9	10.7		1.3	5.6	13.9		28.2	5.2	0.0		33.4	66.7	523.4	95.8	685.8
SW Miramichi	60	2000	8	9	5.0	8.1	10.7		1.6	6.3	14.2		8.2	5.6	3.9		17.7	107.2	95.6	27.3	230.1
SW Miramichi	60	2001	8	31	5.1	8.1	11.1		1.5	6.1	14.6		8.3	12.6	7.1		28.0	96.8	210.6	49.3	356.8
SW Miramichi	60	2002	9	11	5.1	8.2	11.9		1.4	5.9	18.0		13.7	12.8	9.3		35.8	154.2	200.5	66.0	420.7
SW Miramichi	60	2003	9	11	5.3	8.4	12.5		1.7	7.1	22.5		6.3	8.2	4.3		18.7	78.0	135.3	31.7	244.9
SW Miramichi	60	2004	9	15	5.6	8.7	12.0		2.0	7.6	19.6		6.0	10.9	12.5		29.4	76.9	164.6	212.1	453.6
SW Miramichi	61	1970	7	31	4.7	9.3	11.7	11.3	1.1	9.1	17.9	16.5	0.9	0.3	4.7		5.9	10.8	4.0	79.3	94.1
SW Miramichi	61	1971	7	22	3.7				0.6				0.1	0.0	0.0		0.1	1.6	0.0	0.0	1.6
SW Miramichi	61	1972	7	13	4.1	9.3		9.3	0.8	9.1		9.1	0.1	0.5	0.0		0.6	1.6	7.2	0.0	8.8
SW Miramichi	61	1973	7	27	4.4	7.8	11.4	10.9	0.9	5.4	16.8	14.5	1.5	0.2	2.6		4.3	17.3	2.3	43.4	63.0
SW Miramichi	61	1974	7	3	4.5		11.4	11.4	1.0		17.0	17.0	1.7	0.0	2.8		4.5	19.5	0.0	47.2	17.3
SW Miramichi	61	1975	7	15	3.5	8.3	10.5	9.4	0.5	6.5	13.0	9.3	1.7	0.6	1.0		3.3	17.3	8.2	16.4	41.9
SW Miramichi	61	1976	8	31	4.6				1.1				0.3	0.0	0.0		0.3	3.6	0.0	0.0	3.6
SW Miramichi	61	1977	9	7	5.2	9.6		9.6	1.6	10.1		10.1	6.3	2.7	0.0		9.0	77.4	42.0	0.0	119.5
SW Miramichi	61	1978	7	18	3.2		9.5	9.5	0.4		9.8	9.8	0.4	0.0	2.2		2.6	4.2	0.0	34.0	3.8
SW Miramichi	61	1982	10	6	5.3				1.7				0.1	0.0	0.0		0.1	0.6	0.0	0.0	0.6
SW Miramichi	61	1983	10	24	6.6				3.3				0.5	0.0	0.0		0.5	6.9	0.0	0.0	6.9
SW Miramichi	61	1984	8	29	5.5				1.8				0.3	0.0	0.0		0.3	3.9	0.0	0.0	3.9
SW Miramichi	61	1993	9	1	5.3		11.5	11.5	1.7		17.2	17.2	5.4	0.0	6.8		12.2	62.6	0.0	43.7	159.2
SW Miramichi	61	1998	8	24	4.8				1.2				4.1	0.0	0.0		4.1	45.4	0.0	0.0	45.4
SW Miramichi	61	1999	9	2	4.9	8.9			1.3	7.9			29.4	27.0	0.0		56.4	357.0	95.6	0.0	452.6
SW Miramichi	61	2000	8	2	4.8	9.8			1.3	10.0			7.4	5.1	0.0		12.5	93.2	66.3	0.0	159.5
SW Miramichi	61	2001	9	10	4.9	9.5	11.7		1.3	9.7	17.3		10.0	7.0	4.7		21.8	120.3	122.4	31.9	274.6
SW Miramichi	61	2002	9	10	5.2				1.6				5.9	0.0	0.0		5.9	67.9	0.0	0.0	67.9
SW Miramichi	61	2003	9	10	5.3	8.4			1.7	6.7			6.5	2.0	0.0		8.5	81.0	24.9	0.0	106.0
SW Miramichi	61	2004	9	13	5.5				1.8				3.7	0.0	0.0		3.7	45.1	0.0	0.0	45.1
SW Miramichi	62	1970	8	5	4.6	8.7	11.5	10.1	1.1	7.3	17.3	11.8	1.7	1.9	4.3		7.9	20.0	27.8	71.1	118.8

Appendix 2. (cont'd). Atlantic salmon mean length (cm), weight (g), PHS, and biomass (g per 100 m²) by site.

River	Site	Year	Month	Day	Average Fork Length (cm)				Average Whole Weight (g)				Percent Habitat Saturation					Biomass (g per 100 m²)		
					Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	All Parr	Total	Age 0	Age 1	Age 2+
SW Miramichi	62	1971	7	7	3.7	8.6	11.9	10.0	0.6	7.2	18.8	11.2	1.0	2.0	3.2		6.2	10.2	29.4	54.5
SW Miramichi	62	1972	7	11	4.2	9.6		9.6	0.8	9.9		9.9	0.1	0.5	0.0		0.7	1.5	8.3	0.0
SW Miramichi	62	1973	7	24	4.6		14.3	14.3	1.1		33.1	33.1	0.2	0.0	0.5		0.7	2.8	0.0	8.7
SW Miramichi	62	1974	7	4	3.2	8.8		8.8	0.4	7.7		7.7	0.0	0.2	0.0		0.2	0.5	2.3	0.0
SW Miramichi	62	1975	7	10	3.5	8.1		8.1	0.5	6.0		6.0	2.2	0.6	0.0		2.8	22.1	8.7	0.0
SW Miramichi	62	1976	7	7	3.5	7.5	9.8	7.9	0.5	4.8	10.6	5.5	0.7	0.9	0.4		2.0	7.4	13.0	5.8
SW Miramichi	62	1977	7	20	3.9	9.0	11.3	9.2	0.6	8.2	16.3	8.8	2.6	1.5	0.3		4.4	28.1	22.4	5.0
SW Miramichi	62	1978	8	21	4.3	8.3		8.3	0.9	6.5		6.5	0.4	0.2	0.0		0.6	4.4	2.9	0.0
SW Miramichi	62	1979	9	24	5.8	8.9	12.0	9.9	2.2	8.0	19.4	11.1	3.1	2.8	3.0		8.9	39.6	41.9	50.6
SW Miramichi	62	1980	8	13	6.0	8.8	10.8	9.8	2.4	7.7	14.3	10.6	3.6	0.2	0.3		4.1	46.8	2.8	5.3
SW Miramichi	62	1981	9	14	5.8	8.1	10.3	10.0	2.2	5.9	12.2	11.2	13.9	0.8	3.1		17.8	176.1	11.9	49.2
SW Miramichi	62	1982	8	16	5.3	9.5		9.5	1.7	9.8		9.7	1.5	6.2	0.0		7.7	18.1	96.8	0.0
SW Miramichi	62	1983	8	31	5.8	9.3		9.3	2.1	9.1		9.1	6.1	0.7	0.0		6.7	76.9	10.4	0.0
SW Miramichi	62	1984	8	20	5.7	7.1	11.5	7.4	2.1	4.0	17.1	4.6	6.3	3.8	2.1		12.2	79.7	52.8	34.1
SW Miramichi	62	1985	8	7	4.7	9.6		9.6	1.2	10.0		10.0	8.6	1.8	0.0		10.4	101.2	27.2	0.0
SW Miramichi	62	1986	9	5	5.6	9.4		9.4	1.9	9.4		9.3	12.1	13.4	0.0		24.9	151.6	205.7	0.0
SW Miramichi	62	1987	7	7	4.1	7.5	9.3	8.2	0.8	4.7	9.1	6.2	0.5	0.4	0.5		1.5	5.9	6.2	8.0
SW Miramichi	62	1988	7	5	4.2	8.3		8.3	0.8	6.5		6.5	2.2	0.8	0.0		3.0	24.9	11.6	0.0
SW Miramichi	62	1989	6	29	3.4	8.1		8.1	0.4	6.1		6.1	1.3	1.0	0.0		2.3	13.1	14.8	0.0
SW Miramichi	62	1990	7	12	4.0	8.4	9.8	8.6	0.7	6.7	10.6	7.2	7.0	1.8	0.4		9.2	76.1	26.3	7.0
SW Miramichi	62	1992	7	23	4.0	8.6		8.6	0.7	7.3		7.3	2.5	3.5	0.0		5.9	26.8	51.9	0.0
SW Miramichi	62	1993	8	12	4.9	7.1		7.1	1.3	4.0		4.0	8.6	0.9	0.0		9.5	102.4	12.1	0.0
SW Miramichi	62	1994	8	23	4.9	8.5	12.5	8.7	1.4	7.0	22.1	7.3	10.8	13.8	1.4		26.0	128.2	203.7	24.9
SW Miramichi	62	1995	8	17	4.4	8.2	10.0	8.4	0.9	5.8	10.2	6.2	10.6	11.6	1.6		23.8	118.1	159.9	10.0
SW Miramichi	62	1996	9	4	5.3	8.6	10.6	9.0	1.7	7.3	13.5	8.2	20.3	13.8	6.3		40.4	252.1	232.8	45.0
SW Miramichi	62	1997	9	17	5.7	8.7	10.7	8.9	2.0	7.4	13.9	7.9	17.6	15.3	1.9		34.7	219.8	232.7	13.5
SW Miramichi	62	1998	8	26	4.9	7.9	10.6		1.3	5.6	13.5		12.7	12.5	3.0		28.1	150.7	187.9	21.1
SW Miramichi	62	1999	9	2	4.7	8.8	11.4		1.2	7.7	16.8		6.2	4.4	5.7		16.3	327.2	481.8	127.8
SW Miramichi	62	2000	8	3	4.7	8.3	9.9		1.6	7.2	14.6		8.2	6.3	10.2		24.7	131.4	155.5	91.1
SW Miramichi	62	2001	8	31	4.9	8.4	10.0		1.4	7.2	12.0		15.6	9.2	9.6		34.4	208.3	193.9	69.9
SW Miramichi	62	2002	9	11	5.5	9.4	10.3		1.8	8.7	11.7		15.7	6.9	3.5		26.1	198.1	112.3	22.1
SW Miramichi	62	2003	9	19	5.8	9.0	13.4		2.3	8.8	28.2		9.0	13.0	5.2		27.2	118.1	217.0	41.3
SW Miramichi	62	2004	9	14	5.5	9.7	11.8		1.8	10.2	17.6		15.0	13.6	2.8		31.5	178.4	210.3	45.3
SW Miramichi	63	1970	8	6	4.4	7.9	10.2	8.9	1.0	5.6	11.9	8.0	1.4	0.7	1.1		3.2	15.8	10.2	17.5
SW Miramichi	63	1971	8	19	4.3	9.4		9.4	0.9	9.4		9.4	1.3	6.3	0.0		7.6	14.7	97.1	0.0
SW Miramichi	63	1972	8	10	5.8	9.8		9.8	2.2	10.6		10.6	1.9	1.8	0.0		3.7	24.0	27.7	0.0
SW Miramichi	63	1973	8	21	4.9	10.1		10.1	1.3	11.5		11.5	4.3	0.4	0.0		4.7	50.7	7.0	0.0
SW Miramichi	63	1974	8	9	5.0	9.8		9.8	1.4	10.6		10.6	7.1	2.8	0.0		9.9	85.0	43.7	0.0
SW Miramichi	63	1975	8	11	4.2	8.4	12.2	8.7	0.8	6.7	20.6	7.4	4.5	8.7	2.0		15.2	49.6	127.8	34.5
SW Miramichi	63	1977	8	30	4.9	9.9	15.3	10.8	1.3	11.0	40.5	14.3	1.5	0.8	0.5		2.9	18.1	12.9	9.5
SW Miramichi	63	1978	8	22	4.5	9.1		9.1	1.0	8.6		8.6	4.4	4.9	0.0		9.3	49.9	74.9	0.0
SW Miramichi	63	1982	9	30	5.7	9.8	11.6	9.7	2.1	10.6	17.4	10.2	5.5	1.0	0.8		7.2	69.7	15.4	12.6
SW Miramichi	63	1983	10	25	6.0				2.4				7.5	0.0	0.0		7.5	96.7	0.0	0.0
SW Miramichi	63	1984	9	14	5.6	9.3	11.4	9.3	1.9	9.1	16.9	9.0	6.7	0.9	0.9		8.5	83.5	13.9	15.4
SW Miramichi	63	1993	9	9	5.2	8.4		8.4	1.6	6.6		6.7	24.6	7.6	0.0		32.2	306.5	104.6	0.0
SW Miramichi	63	1994	8	18	4.6	7.9		7.9	1.1	5.6		5.6	10.6	25.8	0.0		36.5	123.1	384.5	0.0

Appendix 2. (cont'd). Atlantic salmon mean length (cm), mean weight (g), Percent Habitat Saturation (PHS), and biomass (g per 100 m²) by site and year sampled for 1970-2004.

					Average Fork Length (cm)				Average Whole Weight (g)				Percent Habitat Saturation					Biomass (g per 100 m²)			
River	Site	Year	Month	Day	Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	All Parr	Total	Age 0	Age 1	Age 2+	Total
SW Miramichi	63	1997	9	17	5.4	8.9	11.4	9.4	1.8	7.9	16.8	9.4	15.9	15.4	5.9		37.1	195.5	253.4	43.3	492.2
SW Miramichi	64	1970	8	7	4.8	8.3	10.3	9.5	1.3	6.5	12.4	9.7	1.2	0.6	1.5		3.3	13.8	8.6	24.6	47.1
SW Miramichi	64	1971	7	16	3.7	9.3		9.3	0.6	9.1		9.1	0.7	0.8	0.0		1.6	7.9	12.7	0.0	20.6
SW Miramichi	64	1973	9	12	5.1				1.5				0.2	0.0	0.0		0.2	2.5	0.0	0.0	2.5
SW Miramichi	64	1974	8	1	5.1		9.8	9.8	1.5		10.6	10.6	1.1	0.0	0.3		1.4	13.2	0.0	5.3	18.5
SW Miramichi	64	1975	7	25	3.8	7.8		7.8	0.6	5.4		5.4	0.4	0.2	0.0		0.5	3.9	2.5	0.0	6.4
SW Miramichi	64	1976	8	3	4.6	8.8		8.8	1.1	7.7		7.7	1.4	1.3	0.0		2.7	16.6	18.8	0.0	35.5
SW Miramichi	64	1977	9	8	5.4	9.3		9.3	1.8	9.1		9.1	2.0	0.3	0.0		2.4	25.3	5.2	0.0	30.5
SW Miramichi	64	1978	7	14	3.4	7.8	11.3	9.6	0.4	5.4	16.3	9.9	0.2	0.2	0.5		0.9	1.8	2.8	8.4	13.0
SW Miramichi	64	1979	7	16	2.9				0.3				0.1	0.0	0.0		0.1	0.6	0.0	0.0	0.6
SW Miramichi	64	1980	8	28	6.5				3.1				0.8	0.0	0.0		0.8	10.3	0.0	0.0	10.3
SW Miramichi	64	1981	9	4	5.8				2.2				1.0	0.0	0.0		1.0	12.5	0.0	0.0	12.5
SW Miramichi	64	1982	7	19	5.8	7.1	11.3	9.8	2.2	4.0	16.3	10.6	0.1	0.1	0.5		0.7	1.1	2.0	8.2	11.2
SW Miramichi	64	1983	8	2	5.4				1.7				3.2	0.0	0.0		3.2	39.5	0.0	0.0	39.5
SW Miramichi	64	1984	8	9	5.2		12.3	12.3	1.6		21.1	21.1	0.8	0.0	0.7		1.5	9.6	0.0	11.7	8.5
SW Miramichi	64	1985	9	3	5.9				2.3				2.5	0.0	0.0		2.5	31.5	0.0	0.0	31.5
SW Miramichi	64	1993	9	1									0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW Miramichi	64	1994	8	24	5.2				1.6				14.1	0.0	0.0		14.1	170.0	0.0	0.0	170.0
SW Miramichi	64	1996	9	12	5.6				2.0				15.0	0.0	0.0		15.0	186.2	0.0	0.0	186.2
SW Miramichi	64	1997	9	17	5.5	8.4	10.7	8.8	1.9	6.6	13.9	7.8	16.0	6.7	3.2		25.9	198.2	105.3	21.9	325.4
SW Miramichi	65	1970	8	11	5.2	9.8	11.8	10.8	1.6	10.6	18.6	14.4	0.9	2.0	3.5		6.4	10.5	31.8	59.5	101.9
SW Miramichi	65	1971	7	19	3.7	10.1		10.1	0.6	11.5		11.5	0.4	1.1	0.0		1.5	4.6	16.9	0.0	21.5
SW Miramichi	65	1972	8	8	6.0	10.3	12.2	11.4	2.5	12.4	20.3	16.7	0.4	1.1	2.3		3.8	5.7	16.8	38.7	61.1
SW Miramichi	65	1973	7	31	4.5	9.4	12.1	10.3	1.0	9.3	20.2	12.3	2.8	2.2	1.7		6.7	32.4	33.1	28.8	94.3
SW Miramichi	65	1974	7	30	4.2	9.3	12.3	9.6	0.8	9.2	21.1	10.1	1.7	5.2	1.2		8.1	19.2	79.6	21.0	119.7
SW Miramichi	65	1975	7	31	4.3	8.8	12.6	9.0	0.9	7.6	22.4	8.3	2.8	4.2	0.8		7.9	31.4	63.4	14.3	109.1
SW Miramichi	65	1976	7	29	4.4	8.2	10.2	8.5	0.9	6.2	12.0	6.9	4.4	3.2	1.1		8.7	50.1	47.0	17.6	114.8
SW Miramichi	65	1977	7	28	4.0	9.0		9.0	0.7	8.2		8.2	2.2	7.9	0.0		10.1	24.1	119.6	0.0	143.7
SW Miramichi	65	1978	8	3	3.1	8.7	11.8	8.9	0.3	7.5	18.6	7.9	1.2	3.5	0.5		5.2	12.0	52.7	7.7	72.4
SW Miramichi	65	1979	9	25	5.9	8.5	11.3	9.3	2.3	7.0	16.3	9.0	2.6	1.5	1.1		5.2	33.3	22.0	18.6	73.9
SW Miramichi	65	1980	9	4	5.7	8.9		8.9	2.1	8.0		8.0	3.3	0.5	0.0		3.8	41.6	7.5	0.0	49.0
SW Miramichi	65	1981	9	2	4.9	9.9	11.7	9.9	1.3	11.0	18.0	11.0	4.9	2.9	1.3		9.1	57.7	44.9	22.5	125.1
SW Miramichi	65	1982	7	20	4.5	8.3		8.3	1.0	6.5		6.5	0.6	1.2	0.0		1.8	7.1	17.4	0.0	24.5
SW Miramichi	65	1983	9	7	5.0	10.3		10.3	1.4	12.4		12.4	0.9	0.2	0.0		1.2	11.3	3.4	0.0	14.7
SW Miramichi	65	1984	8	23	5.4	8.7	11.4	9.1	1.8	7.3	16.7	8.6	1.1	1.8	0.3		3.2	13.7	27.1	5.0	45.8
SW Miramichi	65	1985	8	21	4.9	9.2		9.2	1.4	8.9		8.9	3.7	1.2	0.0		4.9	44.6	18.4	0.0	63.0
SW Miramichi	65	1986	9	4	5.3				1.7				2.0	0.0	0.0		2.0	24.4	0.0	0.0	24.4
SW Miramichi	65	1993	9	7	5.8				2.2				6.9	0.0	0.0		6.9	82.4	0.0	0.0	82.4
SW Miramichi	65	1998	8	25	5.0	7.0	9.9		1.4	3.9	11.0		13.7	2.2	2.7		18.6	163.0	34.9	17.3	215.2
SW Miramichi	65	1999	8	23	4.7	8.6	11.6		1.2	7.3	17.4		11.3	12.4	19.2		42.9	71.7	77.9	40.8	190.4
SW Miramichi	65	2000	8	1	5.0	8.8	11.5		1.5	7.9	18.9		10.0	8.0	2.3		20.2	126.7	123.1	17.6	267.4
SW Miramichi	65	2001	8	29	5.0	8.5			1.4	7.4			11.4	5.6	0.0		17.0	133.6	79.3	0.0	212.9
SW Miramichi	65	2002	9	12	5.2	9.0	10.4		1.5	8.2	11.9		28.2	5.8	5.1		39.2	356.2	109.7	32.1	498.0
SW Miramichi	65	2003	9	25	5.8	8.6			2.1	7.1			18.5	12.3	0.0		30.7	238.3	171.3	0.0	409.6
SW Miramichi	65	2004	9	16	5.7	9.8	11.2		2.1	10.4	16.1		10.3	3.5	5.0		18.8	130.3	54.0	83.3	267.6
SW Miramichi	66	1970	8	18	4.5	7.8	11.6	10.5	1.0	5.4	17.8	12.9	2.2	0.5	3.3		6.0	25.4	7.3	54.7	87.5

Appendix 2. (cont'd). Atlantic salmon mean length (cm), mean weight (g), Percent Habitat Saturation (PHS), and biomass (g per 100 m²) by site and year sampled for 1970-2004.

					Average Fork Length (cm)				Average Whole Weight (g)				Percent Habitat Saturation					Biomass (g per 100 m²)			
River	Site	Year	Month	Day	Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	All Parr	Total	Age 0	Age 1	Age 2+	Total
SW Miramichi	66	1971	7	21	4.0	8.6	13.1	9.9	0.7	7.3	25.4	11.1	0.6	2.0	2.5		5.1	6.6	29.9	43.7	80.2
SW Miramichi	66	1972	8	9	5.3	9.2	11.3	9.5	1.7	8.9	16.3	9.7	1.3	6.6	1.8		9.7	16.4	100.4	29.6	146.3
SW Miramichi	66	1973	9	6	5.9				2.3				6.2					78.9			
SW Miramichi	66	1974	8	27	4.7	8.7		8.7	1.2	7.4		7.4	6.1	8.2	0.0		14.3	71.8	122.1	0.0	193.9
SW Miramichi	66	1975	8	21	4.9	7.8	10.8	8.4	1.3	5.5	14.3	6.8	3.9	5.3	3.0		12.2	46.2	75.6	49.4	171.3
SW Miramichi	66	1977	8	30	4.6	8.5		8.5	1.1	6.9		6.9	5.5	5.9	0.0		11.4	64.0	87.6	0.0	151.6
SW Miramichi	66	1978	8	23	4.4	7.3	10.1	7.7	1.0	4.5	11.5	5.1	3.2	1.8	0.5		5.6	37.0	25.0	8.6	70.6
SW Miramichi	66	1979	9	19	5.9	8.3	11.8	9.5	2.3	6.5	18.6	9.6	6.1	0.3	0.4		6.9	78.1	5.0	7.2	90.4
SW Miramichi	66	1980	8	27	5.5		10.6	10.6	1.9		13.3	13.3	4.7	0.0	0.5		5.2	58.9	0.0	8.1	52.3
SW Miramichi	66	1981	9	15	5.6	9.1	11.8	9.3	2.0	8.4	18.6	9.1	4.8	1.8	0.4		7.0	60.1	27.7	6.2	93.9
SW Miramichi	66	1982	9	27	5.7	9.7	11.8	10.5	2.0	10.2	18.6	13.0	1.3	0.8	0.6		2.7	16.6	11.9	10.8	39.2
SW Miramichi	66	1983	9	8	5.3	9.3		9.3	1.7	9.1		9.1	4.6	0.7	0.0		5.3	56.8	10.9	0.0	67.8
SW Miramichi	66	1984	8	7	4.7	9.5		9.5	1.2	9.5		9.5	1.2	2.1	0.0		3.3	14.1	31.8	0.0	46.0
SW Miramichi	67	1970	8	19	4.9				1.3				0.4	0.0	0.0		0.4	4.8		0.0	
SW Miramichi	67	1971	8	6	4.7				1.2				0.1	0.0	0.0		0.1	1.7	0.0	0.0	1.7
SW Miramichi	67	1972	7	25	4.3				0.9				0.0	0.0	0.0		0.0	0.4	0.0	0.0	0.4
SW Miramichi	67	1973	7	18	3.8				0.6				0.1	0.0	0.0		0.1	0.7	0.0	0.0	0.7
SW Miramichi	67	1974	7	2		8.8		8.8		7.7		7.7	0.0	0.2	0.0		0.2	0.0	2.9	0.0	2.9
SW Miramichi	67	1975	8	6	4.3				0.9				0.8	0.0	0.0		0.8	9.2	0.0	0.0	9.2
SW Miramichi	67	1976	8	6	4.9				1.4				2.0	0.0	0.0		2.0	23.8	0.0	0.0	23.8
SW Miramichi	67	1977	9	6	5.4				1.7				1.0	0.0	0.0		1.0	12.9	0.0	0.0	12.9
SW Miramichi	67	1978	7	18	3.8	7.3	8.8	7.8	0.6	4.4	7.7	5.4	0.5	0.2	0.1		0.8	5.3	2.3	2.0	9.6
SW Miramichi	67	1982	10	7	5.6				2.0				0.2	0.0	0.0		0.2	2.4	0.0	0.0	2.4
SW Miramichi	67	1983	10	20	6.7				3.4				0.9	0.0	0.0		0.9	11.9	0.0	0.0	11.9
SW Miramichi	67	1984	8	30									0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW Miramichi	67	1993	9	1	4.9	7.5		7.5	1.3	4.8		4.8	5.7	2.3	0.0		8.0	64.7	28.0	0.0	92.7
SW Miramichi	68	1970	8	20	4.5	8.8	11.3	10.1	1.0	7.7	16.3	11.5	2.1	0.1	0.3		2.5	24.0	2.0	4.3	30.3
SW Miramichi	68	1971	8	13	4.2				0.8				1.2	0.0	0.0		1.2	13.8	0.0	0.0	13.8
SW Miramichi	68	1972	8	14	5.8				2.2				0.1	0.0	0.0		0.1	0.8	0.0	0.0	0.8
SW Miramichi	68	1973	8	16	4.6	10.3	11.8	11.1	1.1	12.4	18.6	15.3	2.5	0.2	0.3		2.9	28.9	3.0	4.5	36.3
SW Miramichi	68	1974	7	23	4.0				0.7				2.4	0.0	0.0		2.4	26.7	0.0	0.0	26.7
SW Miramichi	68	1975	8	18	4.8	8.8		8.8	1.2	7.7		7.7	2.7	2.6	0.0		5.3	31.2	39.5	0.0	70.7
SW Miramichi	68	1993	8	31	4.9	8.5		8.5	1.3	6.9		6.9	14.5	3.0	0.0		17.5	172.7	38.7	0.0	211.4
SW Miramichi	69	1970	8	25	5.1				1.5				1.1	0.0	0.0		1.1	13.9		0.0	
SW Miramichi	69	1971	8	18	5.7				2.1				0.4	0.0	0.0		0.4	4.8	0.0	0.0	4.8
SW Miramichi	69	1972	8	15	5.7				2.1				0.3	0.0	0.0		0.3	3.3	0.0	0.0	3.3
SW Miramichi	69	1973	7	31	4.1				0.7				0.4	0.0	0.0		0.4	4.0	0.0	0.0	4.0
SW Miramichi	69	1974	7	30	3.9				0.7				0.2	0.0	0.0		0.2	2.0	0.0	0.0	2.0
SW Miramichi	69	1975	7	31	5.0				1.4				0.2	0.0	0.0		0.2	1.9	0.0	0.0	1.9
SW Miramichi	69	1976	7	29	4.3				0.9				0.0	0.0	0.0		0.0	0.4	0.0	0.0	0.4
SW Miramichi	69	1977	7	28	3.4				0.4				0.1	0.0	0.0		0.1	0.6	0.0	0.0	0.6
SW Miramichi	69	1978	8	3	4.3				0.9				0.0	0.0	0.0		0.0	0.4	0.0	0.0	0.4
SW Miramichi	69	1982	10	24	5.6	9.1	14.3	9.6	1.9	8.6	33.1	9.9	0.9	2.0	0.6		3.4	10.6	29.7	10.4	50.7
SW Miramichi	69	1983	11	2	6.1	9.2	12.3	11.3	2.6	8.7	21.2	16.5	15.7	4.7	9.3		29.8	204.8	72.1	159.4	436.3
SW Miramichi	69	1984	9	6	6.4	9.2	12.0	10.2	3.0	8.9	19.7	12.0	4.1	1.8	3.2		9.1	54.5	28.3	53.6	136.4
SW Miramichi	69	1993	9	7	6.4	9.2		9.2	3.0	8.8		8.8	6.7	3.2	0.0		9.9	82.2	42.4	0.0	124.6

Appendix 2. (cont'd). Atlantic salmon mean length (cm), mean weight (g), Percent Habitat Saturation (PHS), and biomass (g per 100 m²) by site and year sampled for 1970-2004.

					Average Fork Length (cm)				Average Whole Weight (g)				Percent Habitat Saturation					Biomass (g per 100 m²)			
River	Site	Year	Month	Day	Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	All Parr	Total	Age 0	Age 1	Age 2+	Total
SW Miramichi	69	1994	8	29	5.0	9.0	12.4	10.4	1.4	8.3	21.4	12.7	4.7	15.2	24.1		44.0	52.7	321.7	186.4	560.8
SW Miramichi	69	1997	9	17	5.9	9.0	12.7	9.7	2.3	8.3	23.3	10.3	5.5	26.0	13.7		45.2	65.4	450.4	108.4	624.2
SW Miramichi	69	1998	8	25	4.6	7.7	12.1		1.1	5.2	20.0		6.3	2.8	4.5		13.5	71.2	45.2	30.8	147.1
SW Miramichi	69	1999	8	23	5.3	8.8	10.5		1.7	7.8	13.0		16.4	6.7	3.5		26.6	184.8	276.5	107.2	568.5
SW Miramichi	69	2000	8	1	5.2	8.9	10.5		2.0	8.7	14.6		0.6	4.8	10.4		15.9	7.3	134.0	78.9	220.2
SW Miramichi	69	2001	8	29	6.3	9.1	11.7		3.0	9.0	18.7		11.5	17.5	17.6		46.6	157.4	364.1	135.8	657.3
SW Miramichi	69	2002	9	18	6.2	9.1	12.0		2.9	8.6	19.8		21.1	15.6	27.3		64.0	302.3	354.2	210.6	867.1
SW Miramichi	69	2003	9	25	6.2	9.6	11.9		3.0	10.3	18.7		8.4	39.3	9.9		57.5	117.7	704.0	74.4	896.0
SW Miramichi	69	2004	9	16	5.8	9.5	12.5		2.3	9.8	22.4		17.1	31.1	29.9		78.2	224.6	492.3	522.6	1239.4
SW Miramichi	70	1970	8	27	5.4	8.9	12.6	10.6	1.8	7.9	22.6	13.4	10.7	3.4	15.8		29.9	131.8	50.5	273.1	455.4
SW Miramichi	70	1971	7	8	3.5	8.7		8.7	0.5	7.4		7.4	1.0	4.0	0.0		5.0	10.8	59.4	0.0	70.2
SW Miramichi	70	1972	8	1	5.2	9.7	12.5	10.4	1.6	10.2	22.0	12.7	0.9	5.4	10.5		16.8	11.5	83.7	181.1	276.3
SW Miramichi	70	1973	7	25	4.1		11.6	11.6	0.8		17.4	17.8	0.4	0.0	0.9		1.3	4.8	0.0	14.5	4.2
SW Miramichi	70	1974	8	8	4.4	10.6		10.6	1.0	13.6		13.6	5.2	0.6	0.0		5.8	59.2	9.5	0.0	68.7
SW Miramichi	70	1975	8	5	4.5	7.9		7.9	1.0	5.6		5.6	5.5	0.6	0.0		6.1	62.6	8.6	0.0	71.2
SW Miramichi	70	1976	7	27	4.1	8.3	12.8	8.7	0.7	6.5	23.7	7.4	2.7	1.5	0.4		4.7	29.7	22.6	7.5	59.8
SW Miramichi	70	1977	8	9	4.9	8.3		8.3	1.3	6.5		6.5	8.2	0.2	0.0		8.3	97.3	2.3	0.0	99.6
SW Miramichi	70	1978	8	17	5.3		12.3	12.3	1.7		21.1	21.1	1.6	0.0	0.4		2.0	19.1	0.0	7.1	17.4
SW Miramichi	70	1979	8	29	5.3	7.6	9.6	8.6	1.6	4.9	9.9	7.1	2.9	0.2	0.3		3.4	35.4	2.3	4.7	42.5
SW Miramichi	70	1980	8	8	5.3	9.3		9.3	1.7	9.1		9.1	4.8	0.1	0.0		4.9	58.9	2.2	0.0	61.1
SW Miramichi	70	1981	7	22	4.2	9.3		9.3	0.9	9.1		9.1	3.3	0.2	0.0		3.5	37.4	3.2	0.0	40.6
SW Miramichi	70	1982	7	13	3.6		10.1	10.1	0.5		11.5	11.5	0.4	0.0	0.5		0.9	3.8	0.0	7.8	3.4
SW Miramichi	70	1983	8	4	5.2				1.6				2.5	0.0	0.0		2.5	30.9	0.0	0.0	30.9
SW Miramichi	70	1984	8	8	4.9	8.8	10.7	10.2	1.3	7.7	13.8	11.9	5.8	0.7	3.3		9.9	69.1	11.2	53.2	133.5
SW Miramichi	70	1985	8	13	4.7	9.0		9.0	1.1	8.2		8.2	17.8	0.8	0.0		18.6	207.3	12.4	0.0	219.7
SW Miramichi	70	1986	7	28	3.8	8.1		8.1	0.6	5.9		5.9	7.7	0.4	0.0		8.1	83.0	5.7	0.0	88.7
SW Miramichi	70	1993	9	9	5.3	8.7	11.1	9.1	1.7	7.6	15.5	8.5	24.3	11.3	9.0		44.6	304.3	204.0	65.0	573.2
SW Miramichi	71	1970	8	28	5.2	8.9	11.7	9.9	1.6	7.9	18.0	10.9	4.1	2.0	2.7		8.8	49.8	29.6	45.2	124.6
SW Miramichi	71	1971	7	28	3.9	9.9	11.3	10.1	0.7	10.8	16.3	11.5	2.5	1.9	0.4		4.8	27.4	29.3	6.5	63.2
SW Miramichi	71	1973	9	5	5.7				2.1				3.3	0.0	0.0		3.3	41.6	0.0	0.0	41.6
SW Miramichi	71	1974	8	30	5.4				1.8				10.3	0.0	0.0		10.3	127.7	0.0	0.0	127.7
SW Miramichi	71	1975	7	25	3.9	8.9	10.8	9.1	0.7	7.9	14.3	8.6	3.2	1.3	0.3		4.9	34.9	19.9	5.1	59.9
SW Miramichi	71	1976	8	3	4.9	7.8		7.8	1.3	5.4		5.4	3.1	0.5	0.0		3.6	37.0	6.8	0.0	43.8
SW Miramichi	71	1977	8	11	4.7				1.2				4.1	0.0	0.0		4.1	47.5	0.0	0.0	47.5
SW Miramichi	71	1978	8	28	4.6				1.1				6.2	0.0	0.0		6.2	72.6	0.0	0.0	72.6
SW Miramichi	71	1979	8	31	5.4				1.8				2.3	0.0	0.0		2.3	28.0	0.0	0.0	28.0
SW Miramichi	71	1980	9	12	6.0				2.4				5.1	0.0	0.0		5.1	65.8	0.0	0.0	65.8
SW Miramichi	71	1981	8	13	4.8				1.2				4.4	0.0	0.0		4.4	51.8	0.0	0.0	51.8
SW Miramichi	71	1982	7	21	4.0				0.7				1.8	0.0	0.0		1.8	19.2	0.0	0.0	19.2
SW Miramichi	71	1983	8	5	5.3				1.6				3.1	0.0	0.0		3.1	37.9	0.0	0.0	37.9
SW Miramichi	71	1984	8	17	5.3				1.7				2.1	0.0	0.0		2.1	25.9	0.0	0.0	25.9
SW Miramichi	71	1993	9	1	5.3				1.7				8.5	0.0	0.0		8.5	100.3	0.0	0.0	100.3
SW Miramichi	71	1994	8	24	5.2				1.6				17.4	0.0	0.0		17.4	212.9	0.0	0.0	212.9
SW Miramichi	71	1997	9	10	5.7				2.1				18.4	0.0	0.0		18.4	232.0	0.0	0.0	232.0
SW Miramichi	72	1970	7	6		8.3	11.7	11.4		6.5	18.2	16.9	0.0	0.7	20.3		21.0	0.0	10.5	340.6	351.1
SW Miramichi	72	1971	8	27	5.5	8.9	14.3	10.0	1.9	8.0	32.9	11.2	1.7	7.0	3.8		12.5	21.3	105.6	68.1	195.1

Appendix 2. (cont'd). Atlantic salmon mean length (cm), mean weight (g), Percent Habitat Saturation (PHS), and biomass (g per 100 m²) by site and year sampled for 1970-2004.

River	Site	Year	Month	Day	Average Fork Length (cm)				Average Whole Weight (g)				Percent Habitat Saturation					Biomass (g per 100 m²)			
					Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	All Parr	Total	Age 0	Age 1	Age 2+	Total
SW Miramichi	72	1972	6	23		8.0	11.8	9.3		5.8	18.6	9.0	0.0	3.7	3.6		7.3	0.0	53.8	60.2	114.0
SW Miramichi	72	1973	8	23	5.4	10.4	11.8	11.7	1.8	12.8	18.6	18.3	4.8	1.7	2.9		9.3	59.2	26.7	48.4	134.3
SW Miramichi	72	1974	7	9		8.6		8.6		7.3		7.3	0.0	6.0	0.0		6.0	0.0	88.7	0.0	88.7
SW Miramichi	72	1975	9	12	5.9	9.0	12.5	10.2	2.3	8.2	22.0	11.9	5.4	5.3	6.6		17.3	69.4	79.9	112.7	262.0
SW Miramichi	72	1976	8	19		8.8	11.5	10.0		7.8	17.4	11.3	0.0	4.7	8.5		13.1	0.0	70.2	141.1	211.4
SW Miramichi	72	1977	8	22	5.8	9.6	12.6	11.6	2.2	10.0	22.8	17.4	0.2	2.6	9.6		12.4	2.0	41.0	166.4	209.5
SW Miramichi	72	1978	7	25	4.3	8.2	10.2	9.7	0.9	6.3	11.8	10.2	0.6	1.1	5.6		7.3	7.0	16.4	88.2	111.6
SW Miramichi	72	1982	9	30			12.6	12.6			22.4	22.4	0.0	0.0	1.8		1.8	0.0	0.0	30.5	0.0
SW Miramichi	72	1983	10	28			11.7	11.7			18.0	18.1	0.0	0.0	1.8		1.8	0.0	0.0	30.7	0.0
SW Miramichi	72	1984	7	17									0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW Miramichi	72	1985	6	27		8.6		8.6		7.1		7.1	0.0	0.3	0.0		0.3	0.0	4.7	0.0	4.7
SW Miramichi	72	1993	9	8	6.3	10.3	11.5	10.7	2.8	12.4	17.2	13.9	8.0	7.4	4.9		20.2	98.4	137.7	33.7	269.8
SW Miramichi	73	1970	7	17									0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
SW Miramichi	73	1971	8	20									0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
SW Miramichi	73	1972	6	22									0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
SW Miramichi	73	1973	8	9		8.8	11.3	10.1		7.7	16.3	11.5	0.0	0.6	1.1		1.7	0.0	8.9	18.9	27.8
SW Miramichi	73	1974	7	2		9.8		9.8		10.6		10.6	0.0	0.7	0.0		0.7	0.0	10.6	0.0	10.6
SW Miramichi	73	1975	9	12									0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
SW Miramichi	73	1976	9	10			12.8	12.8			23.7	23.7	0.0	0.0	1.5		1.5	0.0	0.0	26.5	26.5
SW Miramichi	73	1978	9	1									0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
SW Miramichi	73	1982	9	29									0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW Miramichi	73	1983	10	21									0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
SW Miramichi	73	1984	9	4		9.3		9.3		9.1		9.1	0.0	0.5	0.0		0.5	0.0	7.5	0.0	7.5
SW Miramichi	73	1993	9	8	5.7	10.3		10.3	2.1	12.2		12.4	2.7	8.1	0.0		10.8	31.2	115.5	0.0	146.7
SW Miramichi	79	1970	8	6	4.6	7.8	11.0	9.6	1.1	5.4	15.0	9.9	2.2	2.3	7.8		12.3	25.5	33.0	126.9	185.4
SW Miramichi	79	1971	7	21	4.1	8.5	11.1	9.5	0.8	6.8	15.5	9.8	1.4	4.1	5.8		11.2	15.2	60.1	95.1	170.4
SW Miramichi	79	1972	7	11	3.3	8.2	10.3	8.3	0.4	6.1	12.4	6.6	0.2	1.9	0.3		2.4	2.0	27.8	5.1	34.8
SW Miramichi	79	1973	7	3	3.2	8.9	11.6	9.5	0.4	7.9	17.4	9.8	0.7	1.3	0.8		2.8	6.8	20.0	12.6	39.5
SW Miramichi	79	1974	7	18	3.6	8.9		8.9	0.5	7.9		7.9	2.2	1.6	0.0		3.8	23.2	24.5		47.6
SW Miramichi	79	1975	7	17	3.5	8.7	11.6	8.5	0.5	7.4	17.4	7.0	1.6	4.2	3.1		8.8	16.3	62.2	51.7	130.2
SW Miramichi	79	1976	7	8	4.1	7.9	10.9	8.6	0.8	5.6	14.7	7.1	5.7	2.6	1.6		9.9	63.1	38.0	25.9	127.0
SW Miramichi	79	1977	7	20	3.8	8.2	11.0	9.2	0.6	6.2	14.9	8.9	1.6	2.2	2.8		6.5	16.9	31.7	45.5	94.1
SW Miramichi	79	1978	7	17	3.0		9.9	9.9	0.3		10.9	10.9	0.7	0.0	7.4		8.1	6.8	0.0	115.9	8.2
SW Miramichi	79	1979	7	26	4.8	8.0	11.0	8.7	1.3	5.8	14.9	7.4	2.6	1.9	1.1		5.7	31.2	27.8	17.9	76.9
SW Miramichi	79	1980	6	26	3.6	8.6	10.8	8.3	0.5	7.2	14.3	6.3	4.4	1.4	1.1		6.9	46.4	20.3	17.3	83.9
SW Miramichi	79	1981	7	27	4.2	7.6	9.7	9.1	0.8	5.0	10.4	8.5	3.2	0.5	2.1		5.7	35.5	6.6	32.1	74.2
SW Miramichi	79	1982	9	20	5.7	9.5	11.8	8.9	2.1	9.6	18.6	8.0	3.5	2.3	0.4		6.2	43.9	35.2	7.6	86.6
SW Miramichi	79	1983	8	9	5.2	9.2	11.6	9.7	1.6	8.9	17.4	10.3	5.9	3.4	1.5		10.7	71.3	51.4	25.2	147.9
SW Miramichi	79	1984	7	22	4.7	8.6	10.3	8.9	1.1	7.1	12.4	8.0	0.6	0.6	0.3		1.4	6.5	9.2	4.0	19.7
SW Miramichi	79	1986	8	18	5.4	9.4	11.3	9.7	1.7	9.3	16.3	10.2	7.2	5.0	2.3		14.4	88.5	76.3	37.4	202.1
SW Miramichi	79	1987	7	16	4.2	8.9	10.6	9.1	0.8	8.0	13.6	8.6	3.5	7.5	1.7		12.7	38.7	113.2	27.6	179.6
SW Miramichi	79	1988	7	5	3.3	8.4		8.4	0.4	6.8		6.8	3.2	2.0	0.0		5.2	31.9	29.8	0.0	61.6
SW Miramichi	79	1989	7	4	3.0	7.4	9.8	7.6	0.3	4.6	10.6	4.9	2.6	7.6	1.4		11.6	25.0	106.5	22.6	154.1
SW Miramichi	79	1990	7	12	3.4	7.4	10.6	7.7	0.4	4.6	13.6	5.1	3.8	6.0	1.4		11.2	38.9	84.9	22.0	145.8
SW Miramichi	79	1992	7	15	3.4	7.6	11.3	8.0	0.4	5.0	16.3	5.8	2.2	6.7	2.1		11.1	22.9	95.1	35.2	153.2
SW Miramichi	79	1993	7	13	2.9	7.1	10.3	8.1	0.3	4.0	12.4	6.0	0.2	0.4	0.6		1.2	2.3	5.7	8.8	16.8

Appendix 2. (cont'd). Atlantic salmon mean length (cm), mean weight (g), Percent Habitat Saturation (PHS), and biomass (g per 100 m²) by site and year sampled for 1970-2004.

					Average Fork Length (cm)				Average Whole Weight (g)				Percent Habitat Saturation					Biomass (g per 100 m²)			
River	Site	Year	Month	Day	Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	All Parr	Total	Age 0	Age 1	Age 2+	Total
SW Miramichi	79	1994	8	9	5.4	8.6	12.1	8.9	1.7	7.1	20.0	8.0	9.3	12.5	3.4		25.3	114.9	186.0	58.1	359.0
SW Miramichi	79	1995	8	14	5.3	8.5	11.3	8.8	1.9	6.7	15.0	7.7	6.0	30.0	8.6		44.6	83.1	430.1	130.2	643.4
SW Miramichi	79	1996	9	4	5.8	8.9	12.1	9.2	2.2	7.9	19.9	8.8	5.6	6.8	4.6		16.9	70.6	102.8	77.5	250.8
SW Miramichi	79	1997	8	27	5.6	8.8	11.1	9.4	1.9	7.7	15.4	9.4	16.5	18.5	7.1		42.2	205.5	310.3	52.3	568.1
SW Miramichi	79	1998	8	26	5.1	8.4	11.9		1.5	6.7	18.9		11.7	6.3	11.6		29.5	138.8	124.6	83.8	347.2
SW Miramichi	79	1999	8	31	5.1	8.4	11.7		1.5	6.6	17.9		7.1	27.8	22.0		57.0	211.6	324.5	77.6	613.7
SW Miramichi	79	2000	8	17	4.7	8.4	11.4		1.3	7.0	17.5		15.4	9.6	5.1		30.1	199.3	162.9	37.9	400.1
SW Miramichi	79	2001	8	15	5.2	8.4	11.2		1.6	6.8	17.1		12.6	17.1	2.4		32.1	154.9	255.2	43.0	453.1
SW Miramichi	79	2002	9	19	5.7	8.3	11.4		2.1	6.6	16.0		8.2	10.4	3.0		21.6	103.9	152.5	47.7	304.1
SW Miramichi	79	2003	9	18	5.0	8.4	11.2		1.5	6.6	17.0		12.5	12.9	4.6		30.0	157.1	186.8	81.5	425.3
SW Miramichi	79	2004	9	22	5.1	8.5	11.1		1.5	6.8	15.2		16.5	10.4	1.5		28.4	196.2	149.2	24.5	369.9
SW Miramichi	80	1970	7	22			12.1	11.1			20.0	15.4	0.0	0.0	6.8		6.8	0.0	0.0	114.7	114.7
SW Miramichi	80	1971	8	2			15.8				44.6		0.0	0.0	0.6		0.6	0.0	0.0	11.5	11.5
SW Miramichi	80	1972	7	13		8.7		8.7		7.4		7.4	0.0	0.5	0.0		0.5	0.0	7.8	0.0	7.8
SW Miramichi	80	1973	6	27	2.8		11.8	11.8	0.2		18.6	18.6	0.0	0.0	0.3		0.3	0.1	0.0	4.3	4.4
SW Miramichi	80	1974	7	8		10.1		10.1		11.5		11.5	0.0	0.4	0.0		0.4	0.0	5.7	0.0	5.7
SW Miramichi	80	1975	7	7	4.5	8.3	13.3	8.9	1.0	6.5	26.6	8.0	0.1	1.0	0.4		1.5	1.3	15.0	6.9	23.2
SW Miramichi	80	1976	6	29		7.8	10.6	8.7		5.4	13.3	7.5	0.0	0.4	0.4		0.8	0.0	5.4	6.7	12.0
SW Miramichi	80	1977	7	11									0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW Miramichi	80	1978	7	4			8.8	8.8			7.7	7.7	0.0	0.0	0.2		0.2	0.0	0.0	2.3	2.3
SW Miramichi	80	1982	10	18			10.8	10.8			14.3	14.3	0.0	0.0	0.5		0.5	0.0	0.0	8.9	8.9
SW Miramichi	80	1983	11	4									0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW Miramichi	80	1984	9	7									0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW Miramichi	80	1985	7	5									0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW Miramichi	80	1993	8	31									0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW Miramichi	81	1970	7	21									0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW Miramichi	81	1971	7	22	4.6				1.1				0.5	0.0	0.0		0.5	5.7	0.0	0.0	5.7
SW Miramichi	81	1972	7	6		9.1	11.6	10.5		8.8	17.4	13.2	0.0	0.5	0.8		1.4	0.0	8.2	14.1	22.3
SW Miramichi	81	1973	6	26			13.6	13.6			28.5	28.5	0.0	0.0	2.8		2.8	0.0	0.0	49.0	49.0
SW Miramichi	81	1974	6	26		7.8		7.8		5.4		5.4	0.0	0.3	0.0		0.3	0.0	4.3	0.0	4.3
SW Miramichi	81	1975	7	8		9.6	11.2	10.3		10.1	15.9	12.5	0.0	1.2	1.4		2.6	0.0	18.2	23.8	42.0
SW Miramichi	81	1976	6	25			15.1	14.6			39.2	35.5	0.0	0.0	5.3		5.3	0.0	0.0	97.7	97.7
SW Miramichi	81	1977	7	11	2.8	9.3	11.8	10.6	0.2	9.1	18.6	13.3	0.0	0.6	1.2		1.9	0.1	9.9	20.2	30.2
SW Miramichi	81	1978	7	4	3.6	7.8	10.0	9.6	0.5	5.4	11.3	10.1	0.3	0.4	3.6		4.3	3.0	5.4	57.4	65.8
SW Miramichi	81	1979	6	27		8.9	13.3	9.0		7.9	26.6	8.2	0.0	0.8	17.7		18.5	0.0	12.3	311.5	323.8
SW Miramichi	81	1980	7	1									0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW Miramichi	81	1981	7	6			9.6	9.6			9.9	9.9	0.0	0.0	0.5		0.5	0.0	0.0	8.4	8.4
SW Miramichi	81	1982	7	6			8.8				7.7		0.0	0.0	0.2		0.2	0.0	0.0	3.4	3.4
SW Miramichi	81	1983	7	4									0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW Miramichi	81	1984	6	26									0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW Miramichi	81	1985	7	4									0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW Miramichi	81	1986	7	14									0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW Miramichi	81	1993	8	31		9.5	12.0	10.7		9.7	19.3	13.9	0.0	5.5	9.9		15.4	0.0	122.1	70.4	192.5
SW Miramichi	82	1970	8	5	4.7	8.1	10.6	10.2	1.2	5.9	13.6	11.9	6.9	1.1	10.2		18.2	81.0	15.5	164.6	261.1
SW Miramichi	82	1971	7	23	4.5	8.4	11.2	9.0	1.0	6.7	15.9	8.2	3.4	2.7	1.6		7.6	38.4	39.2	26.0	103.6
SW Miramichi	82	1972	9	5	6.0	7.7	11.2	8.9	2.5	5.1	15.8	8.1	3.3	3.5	1.3		8.1	43.0	50.3	20.8	114.1

Appendix 2. (cont'd). Atlantic salmon mean length (cm), mean weight (g), Percent Habitat Saturation (PHS), and biomass (g per 100 m²) by site and year sampled for 1970-2004.

				Average Fork Length (cm)				Average Whole Weight (g)				Percent Habitat Saturation					Biomass (g per 100 m^2)			
Site	Year	Month	Day	Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	All Parr	Total	Age 0	Age 1	Age 2+	Total
82	1973	7	25	4.3	8.9	11.4	10.2	0.9	8.0	16.6	12.0	9.9	1.7	3.5		15.1	111.7	25.3	58.5	195.5
82	1974	6	25	2.6	7.6		7.6	0.2	5.0		5.0	0.6	5.9	0.0		6.5	5.0	83.6	0.0	88.7
82	1975	6	30	3.8	7.3	10.8	7.8	0.6	4.4	14.3	5.4	1.0	7.7	1.3		10.1	11.0	107.9	21.4	140.2
82	1976	6	29	3.2	7.5	11.4	8.1	0.4	4.8	16.9	6.0	0.5	8.1	4.2		12.7	5.0	114.0	69.0	188.0
82	1977	7	14	3.2	7.4	10.4	7.7	0.4	4.6	12.7	5.2	2.0	4.7	1.4		8.1	19.9	66.1	21.7	107.7
82	1978	7	5	2.9	7.8	10.7	8.6	0.3	5.4	13.7	7.3	0.6	9.7	8.8		19.0	5.4	138.3	142.6	286.4
82	1979	6	28	2.3	7.1	9.6	7.6	0.1	4.1	10.1	5.0	0.2	5.3	2.9		8.3	1.8	72.8	44.4	119.0
82	1980	7	4	3.2	7.7	10.8	8.2	0.4	5.1	14.3	6.2	7.5	7.4	3.5		18.3	74.1	105.5	56.3	235.9
82	1981	7	7	2.8	8.2	10.5	8.9	0.2	6.3	13.2	7.9	3.2	6.2	4.8		14.3	29.7	91.3	77.9	198.9
82	1982	7	7	3.7	7.3	10.0	8.3	0.6	4.5	11.2	6.5	2.0	1.9	2.4		6.3	21.6	26.1	38.3	86.0
82	1983	8	15	4.8	8.3	10.9	9.2	1.3	6.4	14.7	8.7	10.5	3.1	3.6		17.2	123.7	45.4	58.9	228.0
82	1984	7	17	4.2	7.7	10.2	8.2	0.8	5.1	11.9	6.3	1.8	1.9	1.1		4.8	20.3	26.5	17.5	64.3
82	1985	7	24	4.6	9.1	12.3	9.3	1.1	8.6	21.1	9.0	8.9	8.7	0.8		18.4	104.0	132.2	13.8	250.0
82	1986	7	24	3.4	8.3		8.3	0.5	6.5		6.4	4.6	7.7	0.0		12.4	47.3	113.7	0.0	161.0
82	1987	7	8	3.7	8.1	11.8	8.8	0.6	6.0	18.4	7.6	17.9	11.8	6.0		35.7	188.5	172.0	100.7	461.2
82	1988	7	20	4.2	8.4	12.0	8.9	0.8	6.7	19.7	7.9	27.0	13.8	5.3		46.1	300.5	203.9	89.4	593.8
82	1989	7	12	3.4	7.4	10.6	7.8	0.4	4.5	13.3	5.3	6.7	7.0	2.7		16.3	68.1	97.6	42.8	208.5
82	1990	7	19	3.9	8.1	12.3	8.6	0.7	6.0	21.1	7.1	20.1	13.6	10.0		43.7	218.0	197.3	170.6	585.9
82	1991	8	4	4.5	8.0	11.2	8.6	1.0	5.8	15.7	7.2	5.6	9.5	4.5		19.7	64.8	137.0	74.5	276.4
82	1992	7	8	3.3	7.9	12.8	8.1	0.4	5.7	23.7	6.0	6.7	7.6	1.2		15.6	67.7	110.2	21.0	198.9
82	1993	8	5	4.3	8.2	11.6	7.7	0.9	6.3	17.8	5.2	9.2	7.7	1.6		18.5	103.4	112.1	27.1	242.6
82	1994	7	14	3.5	7.4	10.9	7.7	0.4	4.6	13.6	5.5	11.6	6.9	2.2		20.6	111.9	96.8	33.2	241.9
82	1995	8	15	4.7	8.1	11.6	8.6	1.2	6.1	16.6	7.3	24.0	15.0	5.4		44.5	287.3	219.3	85.9	592.5
82	1996	9	13	5.1	8.4	11.7	9.9	1.5	6.7	18.2	11.0	24.4	11.4	12.7		48.4	302.4	152.9	69.2	524.6
82	1997	9	17	4.8	8.5	11.8	8.9	1.2	6.8	18.8	8.1	15.9	45.9	18.7		80.5	187.5	677.5	315.5	1180.5
82	1998	9	1	5.2	8.2	11.9		1.6	6.2	19.0		24.8	13.2	6.5		44.4	301.2	191.9	110.0	603.2
82	1999	8	19	4.8	8.1	11.1		1.3	6.1	15.6		29.4	18.2	6.6		54.3	347.8	265.2	108.8	721.8
82	2000	8	11	4.8	8.3	11.6		1.3	7.2	17.4		16.9	6.4	1.2		24.5	206.6	102.8	20.0	329.3
82	2001	8	14	4.9	8.0	10.1		1.5	5.8	12.1		18.1	18.1	7.7		43.9	234.4	262.8	126.2	623.4
82	2002	9	10	5.1	8.4	11.7		1.4	6.6	17.8		25.7	4.4	3.6		33.8	305.7	65.3	58.4	429.4
82	2003	9	10	5.3	7.9	11.3		1.7	5.5	17.1		18.0	11.9	5.0		35.0	226.2	172.7	87.2	486.2
82	2004	9	14	5.3	9.4	12.6		1.6	8.2	24.3		13.7	6.9	3.2		23.8	161.8	92.6	59.8	314.1
83	1970	8	4			10.3				12.4		0.0	0.0	0.3		0.3	0.0	0.0	4.6	4.6
83	1971	7	26	4.0				0.7				1.0	0.0	0.0		1.0	10.5	0.0	0.0	10.5
83	1972	8	31		9.4	11.0	10.7		9.5	15.1	13.7	0.0	0.7	3.7		4.4	0.0	10.9	60.6	71.5
83	1973	8	6		10.6		10.6		13.3		13.3	0.0	0.8	0.0		0.8	0.0	12.3	0.0	12.3
83	1974	7	23		9.5	11.3	9.6		9.7	16.3	10.2	0.0	3.5	0.5		4.0		53.5	8.2	61.7
83	1975	7	3	4.2	9.1	12.8	9.7	0.8	8.5	23.7	10.4	0.6	3.3	5.1		8.9	6.3	49.6	88.7	144.6
83	1976	6	24	3.9	8.9	11.6	9.4	0.7	7.9	17.7	9.3	0.3	2.7	7.1		10.0	2.7	40.3	118.3	161.3
83	1977	7	14	3.0	8.3	10.8	9.4	0.3	6.5	14.3	9.4	0.3	0.6	2.0		2.9	2.8	8.9	32.6	44.3
83	1978	7	5	3.4	6.5	9.3	7.0	0.4	3.1	9.1	3.9	0.7	2.5	1.3		4.4	6.8	32.7	19.7	59.2
83	1979	7	5		7.3	10.8	8.0		4.4	14.3	5.9	0.0	3.1	2.2		5.3	0.0	42.7	36.4	79.1
83	1980	6	30	5.3	8.6	11.0	10.3	1.7	7.3	15.0	12.5	0.1	0.9	7.4		8.4	0.8	12.8	121.6	135.3
83	1981	7	2		8.8	11.3	10.1		7.7	16.3	11.5	0.0	0.4	0.9		1.3	0.0	6.7	14.1	20.8
83	1982	7	8		7.3		7.3		4.4		4.4	0.0	0.3	0.0		0.3	0.0	3.5	0.0	3.5
83	1983	9	2									0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Appendix 2. (cont'd). Atlantic salmon mean length (cm), mean weight (g), Percent Habitat Saturation (PHS), and biomass (g per 100 m^2) by site and year sampled for 1970-2004.

River	Site	Year	Month	Day	Average Fork Length (cm)				Average Whole Weight (g)				Percent Habitat Saturation					Biomass (g per 100 m^2)			
					Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	All Parr	Total	Age 0	Age 1	Age 2+	Total
SW Miramichi	83	1984	7	3									0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW Miramichi	83	1985	7	23		9.7		9.7		10.2		10.2	0.0	2.4	0.0		2.4	0.0	36.8	0.0	36.8
SW Miramichi	83	1986	7	16									0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW Miramichi	83	1993	9	8			12.8				23.7		0.0	0.0	8.5		8.5	0.0	0.0	56.5	56.5
SW Miramichi	84	1971	8	24	5.2	9.8	11.8	10.6	1.6	10.5	18.4	13.3	4.2	5.2	5.5		14.9	51.1	81.9	92.2	225.1
SW Miramichi	84	1972	8	17	5.9	9.6	11.8	10.5	2.3	9.9	18.6	13.1	1.3	4.7	5.9		11.9	16.7	72.1	99.5	188.4
SW Miramichi	84	1973	9	4	5.1	9.6	11.8	10.7	1.5	9.9	18.6	13.8	1.2	0.6	1.0		2.9	14.9	9.2	17.3	41.4
SW Miramichi	84	1974	8	16	5.1	9.9	12.6	10.8	1.5	10.8	22.6	14.1	13.0	11.7	11.0		35.6	157.2	183.3	189.7	530.2
SW Miramichi	84	1975	8	5	4.6	8.3	11.9	8.9	1.1	6.5	19.0	8.0	10.5	17.0	8.9		36.5	121.5	249.0	151.0	521.5
SW Miramichi	84	1976	9	8	5.6	8.7	12.1	9.8	2.0	7.5	20.0	10.5	7.6	15.5	25.0		48.1	95.3	231.5	425.4	752.2
SW Miramichi	84	1977	7	27	4.4	8.3	11.3	9.9	0.9	6.4	16.2	11.0	12.8	5.9	17.5		36.2	144.6	87.1	289.1	520.8
SW Miramichi	84	1978	7	17	3.7	7.3	10.9	7.9	0.6	4.5	14.8	5.5	8.2	11.9	5.8		25.9	86.2	165.7	95.1	347.0
SW Miramichi	84	1979	9	6	5.8	9.0	12.3	10.1	2.2	8.2	21.3	11.7	9.7	17.5	17.6		44.8	123.4	264.7	300.8	688.9
SW Miramichi	84	1980	8	11	5.6	9.6	12.6	10.1	1.9	9.9	22.5	11.6	9.6	18.1	7.9		35.5	119.6	280.2	136.1	535.9
SW Miramichi	84	1981	8	26	5.1	9.5	12.3	10.2	1.5	9.6	20.9	11.9	16.5	14.2	9.7		40.5	200.0	219.8	165.6	585.3
SW Miramichi	84	1982	9	20	6.4	10.0	12.7	10.5	3.0	11.3	23.2	13.3	6.7	21.0	12.7		40.3	88.1	331.1	219.9	639.1
SW Miramichi	84	1983	8	24	5.7	9.5	12.0	10.3	2.0	9.8	19.5	12.3	10.0	11.4	12.4		33.8	126.5	176.9	209.6	513.1
SW Miramichi	84	1984	8	15	5.7	9.5	12.4	10.4	2.1	9.7	21.6	12.9	4.3	3.5	3.3		11.1	54.2	53.9	56.8	164.9
SW Miramichi	84	1985	7	31	4.8	9.6	12.3	9.8	1.2	10.0	21.1	10.6	15.7	13.7	1.9		31.3	184.5	212.1	33.2	429.8
SW Miramichi	84	1986	7	9	3.4	8.7	10.7	8.9	0.4	7.4	13.7	8.0	4.7	25.8	5.8		36.3	48.0	384.7	93.4	526.1
SW Miramichi	84	1987	7	9	4.4	8.6	11.3	8.9	1.0	7.3	16.3	7.9	6.7	11.1	1.6		19.3	75.9	164.9	26.3	267.1
SW Miramichi	84	1988	7	12	4.3	9.0	13.3	9.1	0.9	8.1	26.6	8.6	4.8	12.2	0.9		17.8	54.2	183.7	15.1	252.9
SW Miramichi	84	1989	7	18	4.1	8.5	12.1	9.0	0.8	6.9	20.3	8.3	5.1	20.9	8.6		34.6	56.4	308.5	146.7	511.6
SW Miramichi	84	1990	7	4	3.4	8.0	10.8	8.2	0.4	5.7	14.3	6.3	1.4	5.3	1.4		8.1	14.3	77.0	22.3	113.6
SW Miramichi	84	1992	7	7	3.4	8.0	11.3	8.8	0.4	5.8	16.2	7.6	3.9	29.4	21.8		55.1	39.8	424.7	360.9	825.5
SW Miramichi	84	1993	7	20	3.4	7.3	10.6	7.9	0.4	4.4	13.3	5.6	2.1	13.4	7.8		23.4	21.1	187.2	126.5	334.8
SW Miramichi	84	1994	7	28	4.5	8.5	11.7	9.1	1.0	8.1	18.1	8.4	10.0	22.0	10.3		42.3	118.5	376.2	172.1	666.8
SW Miramichi	84	1995	8	16	4.4	8.2	11.5	8.8	1.0	6.3	17.0	8.2	23.9	26.1	15.9		66.0	279.2	387.1	263.5	929.7
SW Miramichi	84	1996	9	13	6.0	9.0	12.3	10.0	2.4	8.3	20.9	11.5	37.6	25.8	6.4		69.9	497.8	421.1	49.9	968.7
SW Miramichi	84	1997	9	24	6.0	9.3	12.5	9.5	2.5	9.0	22.3	9.6	11.5	53.6	5.8		70.8	148.5	820.1	99.4	1068.1
SW Miramichi	84	1998	9	2	5.6	8.5	11.1		2.0	6.8	15.3		17.7	25.3	23.7		66.7	222.3	373.9	389.0	985.2
SW Miramichi	84	1999	8	23	5.1	8.5	11.6		1.5	7.0	17.6		24.5	29.1	21.9		75.5	295.6	431.9	365.3	1092.7
SW Miramichi	84	2000	8	14	5.5	9.0	11.5		2.2	9.0	18.5		14.5	9.1	7.7		31.2	210.2	150.1	137.2	497.5
SW Miramichi	84	2001	8	16	5.1	8.7	11.2		1.7	7.9	15.3		16.4	31.8	23.8		72.0	228.1	508.0	381.3	1117.4
SW Miramichi	84	2002	9	26	5.5	9.0	12.7		2.0	8.4	22.9		29.8	27.0	14.7		71.5	395.8	418.1	252.4	1066.3
SW Miramichi	84	2003	9	12	5.5	8.4	11.7		2.0	7.3	19.4		7.1	23.0	13.4		43.5	96.5	368.4	241.3	706.2
SW Miramichi	84	2004	9	23	6.1	9.3	12.3		2.7	9.5	21.0		7.6	16.9	23.9		48.3	104.4	268.7	406.3	779.5
SW Miramichi	85	1971	8	24	6.0	9.8	12.2	10.8	2.5	10.8	20.6	14.1	4.5	8.3	9.1		21.9	57.9	130.2	154.7	342.7
SW Miramichi	85	1972	8	29		9.9	12.5	10.4		10.9	22.0	12.7	0.0	7.4	7.9		15.3	0.0	116.6	136.2	252.8
SW Miramichi	85	1973	8	29	5.6	9.8	12.3	10.6	1.9	10.6	21.1	13.3	1.5	1.5	0.9		3.8	18.2	23.2	15.3	56.7
SW Miramichi	85	1974	7	25	3.8	8.4	12.3	8.6	0.6	6.7	21.1	7.3	0.2	13.2	4.4		17.7	2.2	194.1	74.7	271.0
SW Miramichi	85	1975	7	23	4.1	8.2	11.5	8.8	0.8	6.3	17.1	7.8	0.6	13.5	8.2		22.3	6.1	197.7	136.7	340.4
SW Miramichi	85	1977	9	13	5.9	9.6	13.0	9.9	2.3	9.9	24.8	11.0	8.0	19.2	4.1		31.3	102.2	298.4	71.9	472.5
SW Miramichi	85	1978	8	16	4.6	8.5	12.6	8.5	1.1	7.0	22.4	6.9	8.1	11.3	2.2		21.7	94.6	168.0	38.0	300.7
SW Miramichi	85	1979	8	28	5.0	9.2	12.0	9.4	1.4	8.8	19.6	9.3	5.9	16.0	2.3		24.2	70.4	244.6	38.7	353.8
SW Miramichi	85	1980	8	12	5.5	9.0	12.0	9.6	1.8	8.4	19.7	10.1	3.9	8.7	4.6		17.2	48.8	131.5	77.5	257.7

Appendix 2. (cont'd). Atlantic salmon mean length (cm), mean weight (g), Percent Habitat Saturation (PHS), and biomass (g per 100 m²) by site and year sampled for 1970-2004.

					Average Fork Length (cm)				Average Whole Weight (g)				Percent Habitat Saturation					Biomass (g per 100 m²)			
River	Site	Year	Month	Day	Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	All Parr	Total	Age 0	Age 1	Age 2+	Total
SW Miramichi	85	1981	9	16	5.9	9.4	12.3	10.0	2.4	9.4	21.3	11.4	17.6	14.6	10.7		42.9	226.6	225.2	182.6	634.4
SW Miramichi	85	1982	8	17	5.3	8.6	11.9	9.0	1.7	7.1	19.0	8.3	10.3	12.1	4.4		26.8	126.2	179.5	73.9	379.6
SW Miramichi	85	1983	8	29	6.0	8.8	10.9	9.4	2.4	7.7	14.7	9.4	0.4	13.2	9.3		22.9	5.7	198.2	151.2	355.2
SW Miramichi	85	1984	8	14		7.7	11.1	10.5		5.1	15.3	13.2	0.0	0.5	7.4		8.0	0.0	7.4	122.2	129.7
SW Miramichi	85	1993	9	9	5.2	8.1	11.5	9.1	1.6	6.1	17.0	8.5	11.7	15.1	12.3		39.1	139.9	261.7	92.7	494.3
SW Miramichi	89	1970	7	9	3.9	8.8	11.2	10.9	0.6	7.7	16.1	14.6	0.7	1.4	15.1		17.2	7.8	21.1	249.5	278.4
SW Miramichi	89	1971	8	5	5.3	9.2	11.3	10.2	1.7	8.7	16.1	12.1	4.1	3.9	7.0		14.9	49.8	59.2	115.8	224.8
SW Miramichi	89	1972	8	28	5.7	8.9	11.9	9.1	2.1	7.8	19.2	8.6	0.5	5.7	1.2		7.4	5.8	86.1	21.1	113.0
SW Miramichi	89	1973	7	19	4.3	7.0	11.3	10.3	0.9	3.9	16.3	12.4	1.2	0.4	2.7		4.4	14.0	6.0	45.1	65.1
SW Miramichi	89	1974	7	22	4.3	8.7	12.5	9.3	0.9	7.5	22.2	9.1	2.6	3.8	5.2		11.5	28.8	56.4	89.7	174.9
SW Miramichi	89	1975	7	16	4.1	7.6	10.9	8.4	0.8	5.0	14.7	6.8	0.9	10.5	8.8		20.2	10.0	148.3	143.6	301.9
SW Miramichi	89	1976	7	22	4.1	7.1	10.2	8.8	0.8	4.1	12.1	7.7	2.7	2.5	8.8		14.0	29.5	34.1	140.6	204.2
SW Miramichi	89	1977	7	19	3.6	7.9	10.5	8.1	0.5	5.5	13.0	6.0	4.4	8.0	1.5		13.9	46.3	115.5	23.5	185.3
SW Miramichi	89	1978	9	6	3.3	8.1	10.7	8.5	0.4	5.9	13.9	6.9	2.2	4.1	1.6		7.9	22.6	59.2	25.2	106.9
SW Miramichi	89	1982	10	19	5.8	9.2	11.9	10.5	2.2	8.9	19.2	13.1	2.4	4.4	7.5		14.3	30.9	66.7	127.4	225.0
SW Miramichi	89	1983	10	31	5.5	9.2	11.3	9.5	1.9	8.9	16.3	9.7	3.8	1.1	0.3		5.2	47.6	16.0	4.9	68.6
SW Miramichi	89	1984	8	21	5.8	9.1	11.5	9.7	2.2	8.5	17.1	10.5	3.6	4.6	3.2		11.3	45.3	69.9	52.6	167.8
SW Miramichi	89	1985	9	4	5.9	9.1	10.9	9.7	2.3	8.4	14.8	10.3	7.8	4.7	3.8		16.3	99.2	70.8	62.6	232.5
SW Miramichi	89	1986	8	27	5.7	9.1	11.8	9.2	2.0	8.6	18.6	8.8	7.3	13.5	1.4		22.2	91.4	206.3	24.3	321.9
SW Miramichi	89	1993	9	2	5.4	8.0	10.5	9.2	1.8	5.7	13.1	8.8	9.7	4.8	6.6		21.2	116.8	89.8	45.1	251.7
SW Miramichi	90	1970	7	10	4.0	7.8	10.3	10.0	0.7	5.4	12.3	11.4	0.3	0.9	15.4		16.5	2.8	12.8	245.0	260.7
SW Miramichi	90	1971	7	28	5.0	9.6	11.7	10.2	1.4	9.9	18.3	12.2	9.7	5.6	4.3		19.6	116.6	86.5	71.7	274.8
SW Miramichi	90	1972	8	22		9.0	11.8	9.2		8.2	18.6	8.8	0.0	10.6	1.7		12.3	0.0	160.0	28.8	188.8
SW Miramichi	90	1973	7	10	3.9	8.8	11.2	10.3	0.7	7.7	15.8	12.4	4.0	1.7	5.4		11.1	44.0	25.2	89.2	158.4
SW Miramichi	90	1974	7	9	5.4	8.4	11.6	8.3	1.8	6.7	17.4	6.6	0.2	13.2	0.6		14.1	2.5	195.0	10.4	207.9
SW Miramichi	90	1975	7	9		8.5	10.8	9.8		6.8	14.1	10.6	0.0	4.6	12.1		16.7	0.0	68.5	196.5	265.0
SW Miramichi	90	1976	6	28	5.0	7.7	10.4	8.9	1.4	5.2	12.6	7.8	0.2	8.0	13.0		21.3	2.7	114.4	208.7	325.8
SW Miramichi	90	1977	7	18	3.7	8.1	10.6	8.9	0.5	6.0	13.5	7.9	5.7	11.4	10.0		27.1	60.4	165.7	161.3	387.4
SW Miramichi	90	1978	9	6	3.2	7.8	10.6	8.1	0.4	5.3	13.5	6.1	3.3	8.0	2.7		14.0	32.4	114.7	42.9	190.0
SW Miramichi	90	1982	10	5	5.5	9.6	13.3	10.0	1.9	9.9	26.6	11.4	0.7	4.6	1.6		6.9	8.7	71.8	27.6	108.2
SW Miramichi	90	1983	10	27	6.3	9.8	12.4	10.3	2.8	10.6	21.5	12.4	0.1	6.3	2.9		9.2	1.1	98.0	49.5	148.6
SW Miramichi	90	1984	8	23		9.9	12.3	10.8		10.9	21.1	14.1	0.0	2.0	2.0		3.9	0.0	30.7	33.9	64.6
SW Miramichi	90	1993	9	2	5.5	8.6	11.2	10.5	1.9	7.2	15.7	13.1	4.5	3.3	22.5		30.2	52.0	138.0	162.0	352.1
SW Miramichi	91	1970	7	24	3.8	8.4	10.8	9.8	0.6	6.6	14.3	10.6	0.2	5.4	14.7		20.3	2.5	78.8	239.3	320.7
SW Miramichi	91	1971	7	29	3.9	7.5	11.2	8.3	0.7	4.8	15.8	6.5	1.1	18.8	12.8		32.7	12.0	265.0	211.3	488.3
SW Miramichi	91	1972	8	9	4.6	8.1	10.4	8.9	1.1	6.1	12.7	7.9	2.3	11.9	13.5		27.7	26.7	173.1	215.9	415.7
SW Miramichi	91	1973	8	8	4.5	7.7	10.2	8.4	1.0	5.2	12.1	6.7	0.3	2.5	2.0		4.8	3.7	35.1	31.8	70.6
SW Miramichi	91	1974	8	14	4.7	8.6	12.1	9.3	1.1	7.1	20.0	9.0	4.5	20.7	12.4		37.6	53.0	307.0	211.0	571.0
SW Miramichi	91	1975	9	2	4.6	7.1	10.2	8.2	1.1	4.1	11.9	6.3	5.3	21.8	26.4		53.5	61.3	300.8	419.7	781.9
SW Miramichi	91	1977	8	10	3.8	7.9	11.0	8.2	0.6	5.6	15.0	6.3	2.9	29.1	13.2		45.3	31.4	419.1	216.3	666.9
SW Miramichi	91	1978	8	10	3.8	6.4	9.7	7.1	0.6	3.0	10.3	4.0	0.4	4.9	3.9		9.1	4.1	64.2	60.0	128.4
SW Miramichi	91	1979	8	2	4.6	7.1	9.8	8.7	1.1	4.0	10.8	7.4	1.1	3.7	8.7		13.5	13.1	51.1	136.4	200.6
SW Miramichi	91	1980	8	22	5.6	8.4	12.4	8.7	2.0	6.6	21.7	7.5	1.3	8.4	2.0		11.7	16.3	124.2	34.0	174.4
SW Miramichi	91	1981	8	5	4.3	7.8	11.4	9.0	0.9	5.4	16.8	8.2	2.2	4.1	5.3		11.6	24.3	59.3	87.6	171.2
SW Miramichi	91	1982	8	5	4.4	7.6	11.5	8.6	1.0	4.9	17.2	7.1	1.7	16.2	16.1		34.0	19.6	228.9	268.3	516.8
SW Miramichi	91	1983	8	10	4.8	8.0	10.5	8.5	1.2	5.8	13.1	7.0	5.4	14.3	7.4		27.1	63.3	206.6	119.3	389.3

Appendix 2. (cont'd). Atlantic salmon mean length (cm), mean weight (g), Percent Habitat Saturation (PHS), and biomass (g per 100 m²) by site and year sampled for 1970-20 4.

River	Site	Year	Month	Day	Average Fork Length (cm)				Average Whole Weight (g)				Percent Habitat Saturation					Biomass (g per 100 m²)			
					Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	All Parr	Total	Age 0	Age 1	Age 2+	Total
SW Miramichi	91	1984	8	15	4.8	7.6	11.2	8.5	1.2	4.9	15.8	7.0	3.8	6.0	5.9		15.7	44.7	85.1	96.7	226.6
SW Miramichi	91	1985	8	15	5.0	8.3	11.5	9.1	1.4	6.5	17.2	8.5	3.2	10.9	7.5		21.6	37.8	160.6	125.0	323.5
SW Miramichi	91	1986	8	14	5.6	8.6	12.1	9.2	2.0	7.1	20.3	8.7	3.0	23.9	12.1		39.0	37.2	354.9	205.5	597.7
SW Miramichi	91	2000	10	11	5.0	8.0	11.4		1.5	5.6	15.6		6.6	12.1	14.0		32.8	130.5	248.9	111.6	490.9
SW Miramichi	92	1970	7	23	4.1	9.1	12.6	10.3	0.8	8.6	22.4	12.4	10.9	5.5	3.1		19.5	120.8	84.1	52.6	257.5
SW Miramichi	92	1971	8	23	4.8	7.1	12.5	8.4	1.2	4.0	22.2	6.6	5.4	12.6	3.7		21.8	63.5	173.7	64.2	301.4
SW Miramichi	92	1972	8	8	4.7	8.0	10.8	9.0	1.2	5.7	14.1	8.3	5.4	6.6	7.7		20.0	63.0	98.3	125.6	287.0
SW Miramichi	92	1973	8	1	4.2	7.9	10.6	8.3	0.8	5.6	13.4	6.4	4.5	10.2	3.2		18.0	50.4	147.3	52.0	249.8
SW Miramichi	92	1974	8	14	4.4	8.3	12.1	8.5	0.9	6.4	19.8	6.8	8.3	22.5	2.5		33.3	93.7	329.8	42.4	465.9
SW Miramichi	92	1975	7	23	3.6	7.3	11.3	7.3	0.5	4.4	16.3	4.4	1.5	10.2	6.4		18.0	15.3	142.3	105.3	262.9
SW Miramichi	92	1976	7	20	3.6	6.9	9.9	7.5	0.5	3.8	11.0	4.7	2.9	7.5	4.2		14.6	30.6	102.2	65.7	198.5
SW Miramichi	92	1977	8	10	4.5	7.3	10.8	8.2	1.0	4.3	14.4	6.2	8.7	15.1	15.3		39.1	100.4	209.6	248.8	558.7
SW Miramichi	92	1978	8	10	3.6	6.7	9.9	7.1	0.5	3.4	11.1	4.1	2.5	10.3	4.3		17.1	26.1	139.6	67.5	233.2
SW Miramichi	92	1979	8	2	4.7	7.5	10.4	7.7	1.2	4.7	12.7	5.2	5.8	7.1	1.8		14.8	68.2	100.3	29.1	197.5
SW Miramichi	92	1980	8	21	5.6	7.9	10.9	8.2	2.0	5.5	14.7	6.3	9.6	14.2	4.8		28.6	120.3	204.2	78.4	402.9
SW Miramichi	92	1981	8	6	4.5	8.6	11.6	8.9	1.0	7.2	17.6	8.0	12.4	15.7	4.2		32.4	142.1	233.7	70.6	446.4
SW Miramichi	92	1982	8	5	4.2	7.5	11.4	8.3	0.9	4.8	16.8	6.5	1.9	16.1	12.2		30.3	21.8	226.7	203.3	451.8
SW Miramichi	92	1983	8	10	4.9	7.7	10.3	8.8	1.3	5.1	12.5	7.7	10.0	5.1	8.0		23.0	117.9	71.8	128.0	317.6
SW Miramichi	92	1984	8	15	4.6	7.5	9.6	8.4	1.1	4.7	9.9	6.6	6.8	4.0	5.8		16.6	78.9	56.2	89.4	224.5
SW Miramichi	92	1985	8	16	4.9	8.1		8.1	1.4	6.0		6.0	9.6	13.6	0.0		23.2	114.2	197.3	0.0	311.5
SW Miramichi	92	1986	8	14	4.8	7.7	10.3	8.3	1.2	5.1	12.4	6.5	15.6	8.5	5.5		29.7	183.9	121.2	88.2	393.4
SW Miramichi	92	1987	7	21	3.9	7.3	11.0	7.6	0.7	4.4	15.1	4.9	8.9	14.8	3.0		28.7	95.9	206.6	48.6	351.1
SW Miramichi	92	1988	7	13	3.6	7.4	11.3	7.5	0.5	4.6	16.3	4.8	5.4	13.3	1.5		20.2	57.0	186.6	24.0	267.5
SW Miramichi	92	1989	7	13	3.5	7.3	11.7	8.0	0.5	4.4	18.3	5.8	4.1	17.2	10.4		31.7	42.2	239.4	175.3	456.9
SW Miramichi	92	1990	7	17	3.7	7.7	12.0	8.5	0.6	5.1	19.6	7.1	7.8	11.9	9.8		29.6	83.1	169.2	166.5	418.8
SW Miramichi	92	1992	7	21	3.7	7.6	11.9	8.2	0.6	5.0	19.2	6.2	3.9	28.2	14.3		46.5	41.6	399.5	242.5	683.6
SW Miramichi	92	1993	7	29	4.3	8.2	11.5	8.7	0.9	6.1	17.2	7.4	13.7	19.1	13.4		46.2	154.5	278.3	222.5	655.4
SW Miramichi	92	1994	8	30	5.3	8.2	11.8	8.6	1.7	6.2	18.7	7.1	17.7	17.3	4.8		39.8	217.1	252.3	81.7	551.0
SW Miramichi	92	1995	8	17	4.8	8.1	12.2	8.8	1.3	5.9	20.0	8.1	24.1	26.1	14.6		64.8	290.0	427.3	112.5	829.8
SW Miramichi	92	1996	9	11	5.3	8.0	10.5	8.1	1.7	5.8	13.1	6.1	15.8	9.4	14.3		39.4	193.8	190.4	102.4	486.6
SW Miramichi	92	1997	9	23	5.1	8.0	12.4	8.8	1.5	5.8	21.4	7.8	11.7	14.9	6.8		33.4	139.6	233.1	52.4	425.1
SW Miramichi	92	1998	8	27	5.0	8.2	12.3		1.4	6.2	21.1		14.3	10.5	10.2		35.0	170.6	178.3	76.5	425.4
SW Miramichi	92	1999	9	7	5.0	7.8	11.4		1.4	5.4	16.9		20.5	5.9	9.6		35.9	215.0	290.8	45.8	551.6
SW Miramichi	92	2000	8	9	4.3	7.4	10.4		0.9	4.7	13.3		7.1	17.0	9.7		33.8	87.1	283.2	73.7	444.0
SW Miramichi	92	2001	8	23	4.8	7.2	9.8		1.3	4.4	10.7		6.4	14.0	4.9		25.3	79.0	202.0	77.1	358.1
SW Miramichi	92	2002	9	11	5.2	8.0	11.7		1.6	5.8	17.4		14.5	17.5	7.4		39.4	185.4	276.6	53.3	515.3
SW Miramichi	92	2003	9	11	4.8	7.5	11.6		1.2	4.8	18.0		5.9	12.0	8.2		26.2	65.7	191.7	61.8	319.2
SW Miramichi	92	2004	9	15	5.0	7.9	11.8		1.4	5.5	18.2		17.2	16.0	9.7		42.9	198.4	226.0	161.0	585.3
SW Miramichi	93	1970	7	14	5.4	9.8	12.8	11.3	1.8	10.6	23.7	16.3	0.3	1.1	2.8		4.2	4.1	16.5	49.0	69.7
SW Miramichi	93	1971	8	4									0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW Miramichi	94	1971	8	26	5.0	8.3	11.6	8.8	1.4	6.4	17.4	7.6	4.6	14.0	2.1		20.7	55.3	205.6	34.9	295.7
SW Miramichi	94	1972	8	7	4.7	8.4	11.9	9.4	1.2	6.6	19.1	9.4	6.1	3.1	2.0		11.3	71.7	45.3	34.4	151.4
SW Miramichi	94	1973	7	31	4.0	7.7		7.7	0.7	5.2		5.2	5.1	1.3	0.0		6.4	55.1	19.1	0.0	74.2
SW Miramichi	94	1974	8	10	4.3	8.1	10.8	8.5	0.9	6.1	14.3	6.9	2.4	4.0	1.3		7.7	27.6	57.9	20.8	106.3
SW Miramichi	94	1975	8	21	4.8	7.5	10.9	8.2	1.1	4.7	14.5	6.2	4.8	10.1	6.3		21.2	55.3	141.6	102.5	299.5
SW Miramichi	94	1976	6	26	2.8	6.7	9.9	7.7	0.3	3.4	11.0	5.2	1.3	3.0	2.3		8.7	12.6	40.6	36.1	89.3

Appendix 2. (cont'd). Atlantic salmon mean length (cm), mean weight (g), Percent Habitat Saturation (PHS), and biomass (g per 100 m²) by site and year sampled for 1970-2004.

					Average Fork Length (cm)				Average Whole Weight (g)				Percent Habitat Saturation					Biomass (g per 100 m²)			
River	Site	Year	Month	Day	Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	All Parr	Total	Age 0	Age 1	Age 2+	Total
SW Miramichi	94	1977	8	10	3.9	7.1	10.9	7.9	0.7	4.0	14.6	5.6	4.3	7.9	6.6		18.7	46.3	108.3	107.6	262.1
SW Miramichi	94	1978	8	10	2.8	8.8	11.1	7.7	0.2	3.6	15.3	5.3	0.3	1.2	1.3		2.8	2.6	16.8	20.6	39.9
SW Miramichi	94	1979	8	2	4.8	8.1	10.8	9.0	1.2	5.9	14.3	8.2	0.4	0.6	0.7		1.7	4.5	9.0	10.8	24.3
SW Miramichi	94	1980	8	21	5.2		10.3	10.3	1.6		12.4	12.4	1.7	0.0	0.5		2.2	20.7	0.0	8.3	29.0
SW Miramichi	94	1981	8	5	4.4	7.5		7.5	1.0	4.7		4.7	0.6	0.7	0.0		1.3	6.8	9.8	0.0	16.6
SW Miramichi	94	1982	8	5	4.4	7.8	10.9	8.5	1.0	5.4	14.8	7.0	1.2	3.6	2.7		7.5	13.3	51.9	43.9	109.1
SW Miramichi	94	1983	8	10	4.7	7.8		7.8	1.1	5.4		5.4	2.7	0.5	0.0		3.2	31.4	7.1	0.0	38.5
SW Miramichi	94	1984	8	15	4.4	8.0		8.0	0.9	5.8		5.8	2.7	1.2	0.0		4.0	31.1	17.9	0.0	49.0
SW Miramichi	94	1985	8	15	4.3	7.6	9.8	8.1	0.9	4.9	10.6	6.1	5.8	3.9	2.6		12.3	65.2	55.6	40.1	160.9
SW Miramichi	94	1986	8	14	4.6	8.1	10.0	8.9	1.1	5.9	11.2	7.9	8.2	1.4	1.9		11.5	95.9	20.6	29.4	145.9
SW Miramichi	95	1970	7	8	3.4	9.2	11.9	11.0	0.4	8.8	18.8	15.2	0.3	2.4	10.2		12.8	2.8	36.0	171.5	210.2
SW Miramichi	95	1971	7	12	3.9	9.1	13.0	9.6	0.7	8.5	24.7	9.9	0.7	5.3	1.7		7.7	7.4	78.8	30.2	117.4
SW Miramichi	95	1972	7	18	4.1	8.5	10.3	9.0	0.7	6.9	12.4	8.3	0.0	0.8	0.5		1.4	0.5	12.0	8.5	21.0
SW Miramichi	95	1973	7	24	4.4	10.1		10.1	0.9	11.5		11.5	0.7	0.5	0.0		1.3	8.4	8.6	0.0	17.1
SW Miramichi	95	1974	7	30	4.5	8.6	11.8	8.8	1.0	7.1	18.6	7.8	1.2	13.7	2.9		17.8	13.5	203.3	48.5	265.3
SW Miramichi	95	1975	7	30	4.7	8.2	11.0	9.0	1.2	6.2	15.0	8.3	6.3	9.3	8.6		24.2	73.3	135.0	141.3	349.6
SW Miramichi	95	1976	7	29	4.8	8.5	12.3	9.2	1.3	6.9	21.1	8.8	2.4	4.0	5.3		11.7	28.9	59.0	90.5	178.4
SW Miramichi	95	1977	7	28	4.4	8.8	11.5	9.5	1.0	7.8	17.3	9.7	4.8	5.9	4.6		15.3	54.4	89.3	76.1	219.8
SW Miramichi	95	1978	8	3	3.5	7.3	11.1	7.4	0.5	4.4	15.3	4.5	3.8	8.4	0.7		12.9	39.2	116.9	12.2	168.3
SW Miramichi	95	1982	10	14	5.7	8.4	11.1	8.5	2.1	6.8	15.3	7.0	0.7	22.8	1.9		25.3	8.5	336.5	30.6	375.6
SW Miramichi	95	1983	11	1	5.9	8.8	11.2	10.3	2.3	7.7	15.9	12.4	12.7	0.6	2.0		15.3	162.2	9.6	32.9	204.7
SW Miramichi	95	1984	7	24	3.7				0.6				0.2	0.0	0.0		0.2	2.1	0.0	0.0	2.1
SW Miramichi	95	1993	9	7	4.6	7.6		7.6	1.1	5.0		5.2	9.4	4.8	0.0		14.2	107.6	62.3	0.0	169.9
SW Miramichi	95	1994	8	29	4.9	7.6	8.9	7.8	1.3	4.9	8.0	5.4	23.6	9.9	3.0		36.5	288.0	153.6	20.0	461.7
SW Miramichi	95	1997	9	11	4.7	7.1	12.7	7.6	1.1	4.1	23.2	5.0	20.6	9.1	3.7		33.4	246.6	129.4	28.5	404.4
SW Miramichi	95	1998	8	25	5.6	7.7	10.8		2.0	5.1	14.2		2.3	15.7	15.2		33.1	25.3	279.2	113.0	417.5
SW Miramichi	95	1999	8	23	4.6	8.3	10.7		1.1	6.5	13.7		0.5	3.5	11.3		15.3	190.4	129.6	55.8	375.8
SW Miramichi	95	2000	8	1	4.8	8.2	11.8		1.3	6.5	18.6		17.6	20.0	2.8		40.3	220.5	318.8	21.2	560.6
SW Miramichi	95	2001	8	29	4.7	7.8	10.2		1.1	5.4	12.0		19.2	15.9	1.1		36.2	230.5	232.7	7.5	470.8
SW Miramichi	95	2002	9	12	5.5	8.1	12.0		1.9	6.4	19.1		16.7	14.1	3.0		33.8	214.8	223.8	21.8	460.5
SW Miramichi	95	2003	9	25	6.1	8.7	10.6		2.6	7.7	13.3		12.9	19.5	3.4		35.8	170.3	318.9	23.8	513.0
SW Miramichi	95	2004	9	16	5.4	8.9	10.7		1.8	7.6	12.5		18.2	6.7	2.7		27.6	226.5	95.5	39.3	361.3
SW Miramichi	96	1970	7	7	3.5		12.0	12.0	0.5		19.6	19.6	0.4	0.0	3.9		4.3	4.1	0.0	65.6	69.7
SW Miramichi	96	1971	7	19	3.6	9.7	12.8	10.1	0.5	10.3	23.7	11.7	0.1	3.1	1.0		4.2	1.2	48.7	17.3	67.3
SW Miramichi	96	1972	7	18		7.6	10.6	9.1		4.9	13.6	8.4	0.0	1.1	1.0		2.0	0.0	15.0	15.5	30.4
SW Miramichi	96	1973	7	24	4.3	10.0	12.2	11.0	0.9	11.4	20.4	15.2	1.4	2.3	3.4		7.1	16.2	35.9	57.2	109.2
SW Miramichi	96	1974	7	30	3.8	9.2	12.1	9.3	0.6	8.9	19.8	9.1	0.2	18.0	1.0		19.2	2.0	275.7	17.0	294.7
SW Miramichi	96	1975	7	30	5.6	8.9	11.9	11.0	1.9	8.0	19.1	15.0	1.1	2.5	13.1		16.7	14.3	37.1	220.4	271.8
SW Miramichi	96	1976	7	29		8.2	13.4	8.7		6.3	27.2	7.5	0.0	15.0	6.0		21.0	0.0	218.7	106.6	325.3
SW Miramichi	96	1977	7	28	4.8	9.3	12.0	11.2	1.2	9.0	19.4	15.8	4.1	3.5	16.8		24.3	48.0	53.5	283.4	384.9
SW Miramichi	96	1978	8	3	4.1	7.8	10.7	7.9	0.8	5.3	13.9	5.6	1.6	23.8	1.7		27.1	17.9	340.1	27.0	384.9
SW Miramichi	96	1982	10	14	5.6	8.7	10.5	9.0	2.0	7.4	13.2	8.1	1.1	7.1	2.2		10.5	13.9	106.4	36.0	156.3
SW Miramichi	96	1983	11	3		9.7	12.2	11.0		10.2	20.6	15.1	0.0	4.6	9.6		14.3	0.0	71.9	164.4	236.4
SW Miramichi	96	1984	7	24		8.7	11.0	10.2		7.4	14.9	12.0	0.0	1.0	3.9		5.0	0.0	15.6	63.9	79.5
SW Miramichi	96	1993	9	7	5.2	8.4	10.2	9.0	1.6	6.7	12.1	8.2	7.7	8.1	5.1		20.9	90.8	137.4	34.9	263.1
SW Miramichi	120	1994	8	22	5.5	10.4	12.2	10.8	1.9	12.7	20.3	14.3	22.9	26.3	13.2		62.3	288.4	498.8	100.8	887.9

Appendix 2. (cont'd). Atlantic salmon mean length (cm), mean weight (g), Percent Habitat Saturation (PHS), and biomass (g per 100 m²) by site and year sampled for 1970-2004.

River	Site	Year	Month	Day	Average Fork Length (cm)				Average Whole Weight (g)				Percent Habitat Saturation					Biomass (g per 100 m²)			
					Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	All Parr	Total	Age 0	Age 1	Age 2+	Total
SW Miramichi	120	1998	9	21	6.3		10.1		2.8		11.5		12.0	0.0	16.3		28.3	152.0	0.0	110.4	262.4
SW Miramichi	120	1999	9	7	6.2	10.0	12.4		2.7	11.4	21.6		16.9	15.5	7.5		39.8	205.2	283.7	22.8	511.7
SW Miramichi	120	2000	9	14	5.9	9.7	11.2		2.5	10.6	15.8		24.3	9.9	18.2		52.4	347.9	267.7	131.6	747.2
SW Miramichi	120	2001	8	21	6.1	8.8	10.4		2.8	9.3	16.5		12.8	7.0	15.5		35.3	181.4	224.4	142.2	548.1
SW Miramichi	120	2002	9	25	6.2	9.9	12.1		2.9	12.5	19.9		16.9	6.9	8.6		32.4	240.5	161.1	60.9	462.5
SW Miramichi	120	2003	9	24	6.0	9.7	11.6		2.6	11.2	18.8		11.0	6.5	23.7		41.2	147.5	244.1	186.6	578.2
SW Miramichi	120	2004	9	21	6.0	9.7	12.1		2.5	11.0	19.6		21.2	15.7	16.4		53.2	278.4	259.6	270.5	808.4
SW Miramichi	121	1994	8	22	4.4	7.8	10.8	8.6	1.0	5.3	14.2	7.3	15.0	10.9	10.2		36.0	173.5	188.8	74.0	436.2
SW Miramichi	121	1998	9	21	6.3	7.3	10.5		2.8	4.3	12.9		26.2	8.0	4.2		38.3	343.9	120.8	29.3	493.9
SW Miramichi	121	1999	9	7	4.6	7.2	10.8		1.1	4.1	14.3		14.6	11.9	4.4		30.9	90.5	98.9	36.8	226.1
SW Miramichi	121	2000	9	14	5.1	8.1	10.8		1.5	6.0	14.9		14.1	7.9	15.2		37.2	172.3	170.8	113.3	456.4
SW Miramichi	121	2001	8	30	4.6	7.7	10.7		1.1	5.1	12.8		13.4	9.5	4.2		27.1	160.1	143.2	27.4	330.8
SW Miramichi	121	2002	9	25	4.6	7.7	10.5		1.1	5.0	11.9		13.4	5.3	4.5		23.3	165.2	85.1	28.4	278.7
SW Miramichi	121	2003	9	24	5.0	7.7	11.5		1.5	5.1	16.5		8.8	12.4	6.1		27.4	115.3	194.5	43.9	353.7
SW Miramichi	121	2004	9	21	4.9	7.9	10.1		1.2	5.2	11.3		14.4	9.4	6.4		30.2	153.4	124.9	99.2	377.4
SW Miramichi	122	1994	8	22									0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW Miramichi	124	1994	8	24	5.5	8.5		8.5	1.9	6.9		6.9	5.3	2.8	0.0		8.0	61.9	35.1	0.0	97.0
SW Miramichi	125	1994	8	26	5.1	8.1	10.8	8.3	1.5	6.1	14.1	6.4	29.1	34.3	4.3		67.7	362.7	543.8	32.7	939.2
SW Miramichi	125	1996	9	11	5.5	7.8	10.3	8.3	1.9	5.4	12.5	6.6	23.6	22.7	12.1		58.4	298.4	387.8	89.7	775.9
SW Miramichi	125	1997	9	23	5.4	8.7	11.9	9.1	1.8	7.5	19.1	8.4	15.9	23.3	4.0		43.3	196.3	367.8	30.8	594.8
SW Miramichi	126	1994	8	29	5.5	8.6	10.6	9.6	1.9	7.2	13.5	10.0	13.3	5.0	8.6		26.9	163.7	108.7	59.0	331.4
SW Miramichi	126	1997	9	23	5.7	8.6	12.9	8.8	2.0	7.1	24.3	7.7	32.4	16.8	2.9		52.1	418.3	254.9	22.3	695.5
SW Miramichi	126	1998	8	25	5.1	7.9	12.9		1.5	5.6	24.3		10.8	16.0	3.8		30.6	127.9	238.7	30.0	396.6
SW Miramichi	126	1999	8	23	5.4	9.0	11.6		1.8	8.1	17.7		10.3	7.7	6.7		24.7	274.8	346.5	39.4	660.8
SW Miramichi	127	1994	8	29	5.2	8.1	10.0	8.3	1.6	6.1	11.3	6.5	27.6	12.1	2.1		41.8	347.0	181.8	14.4	543.2
SW Miramichi	128	1994	8	31	5.8	9.9		9.9	2.2	11.1		11.1	14.0	24.1	0.0		38.1	174.4	372.8	0.0	547.1
SW Miramichi	128	1995	8	31	5.3				1.7				7.3	0.0	0.0		7.3	85.6	0.0	0.0	85.6
SW Miramichi	129	1994	8	31	5.6	9.1	12.1	9.2	1.9	8.4	20.0	8.8	15.9	18.3	27.2		61.4	197.0	393.2	210.4	800.6
SW Miramichi	129	1995	8	31	5.6	9.0	10.9	10.1	2.0	8.3	14.5	11.7	31.6	9.4	21.9		62.9	407.4	254.4	159.3	821.1
SW Miramichi	129	1997	9	11	6.0	8.9	12.6	9.9	2.4	7.9	22.9	10.8	22.8	16.4	14.8		54.0	293.2	295.6	114.9	703.6
SW Miramichi	129	1998	9	21	6.2	8.9	10.9		2.7	8.0	14.8		14.4	18.6	6.8		39.8	183.3	313.6	49.6	546.5
SW Miramichi	129	1999	9	7	5.6	9.5	12.5		2.0	9.8	21.8		6.6	25.6	6.4		38.6	138.1	165.3	58.9	362.3
SW Miramichi	129	2000	9	14	5.1	9.1	11.0		1.7	9.1	16.0		11.2	16.6	16.0		43.9	160.2	365.8	125.2	651.2
SW Miramichi	129	2001	8	21	5.8	9.6	12.6		2.6	10.6	24.8		18.7	18.4	17.7		54.7	281.6	379.4	148.4	809.3
SW Miramichi	129	2002	9	25	5.8	9.6	12.4		2.2	10.1	20.7		10.7	31.0	10.4		52.1	138.7	539.5	78.6	756.8
SW Miramichi	129	2003	9	24	5.4	8.9	12.0		2.0	8.2	20.5		11.6	14.1	17.4		43.1	157.6	287.2	135.9	580.7
SW Miramichi	129	2004	9	21	5.6	9.4	12.5		2.1	9.4	23.3		13.3	23.4	7.1		43.8	179.8	362.0	128.8	670.5
SW Miramichi	130	1994	8	31	5.0	8.5	11.4	9.4	1.4	7.0	16.7	9.3	28.7	23.5	20.5		72.7	357.7	443.0	157.1	957.8
SW Miramichi	150	1995	9	1	4.7	8.9		8.9	1.2	8.0		8.0	8.1	2.9	0.0		11.0	93.0	36.8	0.0	129.9
SW Miramichi	150	1996	9	4	5.3	7.8		7.8	1.7	5.4		5.4	10.3	5.9	0.0		16.2	123.2	78.1	0.0	201.3
SW Miramichi	150	1997	8	29	5.9	8.5	10.9	9.1	2.3	7.0	14.8	8.6	5.7	13.3	7.0		26.1	68.3	224.4	50.6	343.3
SW Miramichi	200	2000	8	2	5.5	9.6	11.2		2.0	10.6	19.0		14.4	12.9	8.7		36.0	197.3	254.5	74.1	525.9
SW Miramichi	200	2001	8	28	5.4	8.7	10.7		1.8	7.4	13.9		5.7	16.0	8.4		30.1	67.8	278.6	60.4	406.8
SW Miramichi	200	2002	8	29	5.7	9.5	11.1		2.3	9.7	15.2		11.4	9.0	4.5		25.0	158.3	155.0	30.7	343.9
SW Miramichi	200	2003	9	17	6.1	9.3	11.9		2.8	9.3	18.3		9.9	11.9	13.0		34.8	138.2	241.4	92.5	472.2
SW Miramichi	200	2004	9	20	6.0	11.3	15.3		2.5	16.5	42.9		9.6	36.4	4.4		50.4	128.5	603.5	87.3	819.4

Appendix 2. (cont'd). Atlantic salmon mean length (cm), mean weight (g), Percent Habitat Saturation (PHS), and biomass (g per 100 m²) by site and year sampled for 1970-2004.

River	Site	Year	Month	Day	Average Fork Length (cm)				Average Whole Weight (g)				Percent Habitat Saturation					Biomass (g per 100 m²)			
					Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	All Parr	Total	Age 0	Age 1	Age 2+	Total
SW Miramichi	203	2000	8	29	5.7	9.2	10.9		2.4	8.9	14.5		29.6	23.7	4.7		58.0	453.7	392.3	34.0	879.9
SW Miramichi	204	2000	10	13	5.5	8.6	12.1		1.8	6.9	18.0		7.5	6.9	6.1		20.4	88.2	112.3	39.5	240.1
SW Miramichi	206	2001	8	29	5.5	8.4	11.1		1.8	6.7	14.9		8.2	18.3	2.7		29.1	99.1	277.4	18.9	395.3
SW Miramichi	206	2002	9	12	6.0	10.2	13.4		2.6	12.3	27.8		13.8	7.8	2.0		23.6	188.0	122.4	14.5	324.9
SW Miramichi	206	2004	9	16	5.0	8.8	10.7		1.5	8.3	13.3		21.1	9.5	2.2		32.8	259.2	152.8	34.8	446.9
Bartholomew	118	1975	8	19	4.8			11.2	1.2			15.7	0.1			6.9	7.0	1.0			114.8
Bartholomew	118	1976	8	28	5.7			11.0	2.1			14.9	1.2			4.5	5.7	15.3			88.2
Bartholomew	118	1977	7	19	4.0			9.5	0.7			9.7	5.8			4.9	10.7	64.0			139.8
Bartholomew	118	1978	7	7	3.3			8.6	0.4			7.1	4.3			11.6	15.8	42.8			214.3
Bartholomew	118	1979	7	14	3.8			7.9	0.6			5.5	0.3			16.1	16.4	2.8			234.2
Bartholomew	118	1980	7	3	4.0			9.7	0.7			10.2	0.1			11.6	11.7	1.3			181.2
Bartholomew	118	1981	7	14	4.3			9.5	0.9			9.7	6.8			9.3	16.1	76.1			220.2
Bartholomew	118	1984	7	31	4.8			9.5	1.2			9.7	0.8			13.7	14.5	9.7			221.8
Bartholomew	118	1989	9	1	4.8			8.4	1.3			6.7	4.7			5.7	28.4	56.0			139.9
Bartholomew	118	1990	9	12	5.4			8.5	1.8			6.9	3.9			12.2	37.4	48.7			229.3
Bartholomew	118	1994	8	16	4.8	8.3		8.3	1.2	6.5		6.5	8.1	7.1	0.0		15.1	92.6	96.5	0.0	189.1
Bartholomew	119	1970	7	31	4.5			11.8	1.0			18.6	0.2			0.7	0.8	2.0			13.1
Bartholomew	119	1971	7	16	4.1			9.3	0.7			9.1	0.0			0.2	0.2	0.4			2.9
Bartholomew	119	1972	7	12	3.8				0.6				0.0			0.0	0.0	0.2			0.2
Bartholomew	119	1973	6	28	3.3			9.8	0.4			10.6	0.7			0.2	0.9	7.2			10.4
Bartholomew	119	1974	8	13	5.5			11.6	1.9			17.4	3.7			1.6	5.3	45.9			72.0
Bartholomew	119	1975	8	10	4.1			9.5	0.8			9.6	0.4			2.7	3.1	3.9			46.3
Bartholomew	119	1976	7	22	4.3			9.8	0.9			10.6	3.2			0.5	3.8	36.3			44.8
Bartholomew	119	1977	7	25	4.4			9.6	1.0			10.0	8.2			4.3	12.6	94.1			160.9
Bartholomew	119	1978	7	5	3.8			9.1	0.6			8.6	0.8			4.1	4.9	8.7			71.6
Bartholomew	119	1979	8	1	5.2			9.2	1.5			8.7	4.3			4.6	8.9	52.5			122.5
Bartholomew	119	1980	8	26	6.0			10.1	2.4			11.7	7.9			1.7	9.6	102.3			129.1
Bartholomew	119	1981	7	9	4.4			9.3	1.0			9.1	0.9			0.3	1.2	10.4			14.4
Bartholomew	119	1984	7	25	4.7			9.7	1.2			10.3	1.4			1.7	3.1	16.8			43.3
Bartholomew	119	1989	9	7	4.9			8.9	1.3			8.0	2.4			2.3	4.7	28.0			63.0
Bartholomew	119	1990	8	28	4.4			8.9	1.0			7.9	3.9			0.6	4.5	44.7			53.6
Bartholomew	119	1994	8	18	5.1	8.4		8.4	1.5	6.7		6.7	23.3	14.3	0.0		37.7	288.9	206.4	0.0	495.3
Bartholomew	119	1995	8	18	4.5	8.6	12.5	10.5	1.0	6.8	20.8	13.8	18.8	8.7	22.8		50.3	219.7	186.7	165.0	571.4
Bartholomew	119	1996	9	10	5.1	8.4	11.2	8.7	1.5	6.7	15.7	7.4	23.7	20.4	5.0		49.1	293.0	324.2	37.4	654.6
Bartholomew	119	1997	9	18	4.9	8.4	12.7	8.6	1.4	6.7	23.2	7.3	22.3	24.4	2.9		49.6	272.6	374.5	22.7	669.8
Bartholomew	119	1998	8	18	4.9	7.6			1.3	5.0			14.1	13.7	0.0		27.8	167.9	193.1	0.0	361.0
Bartholomew	119	1999	9	15	5.0	8.5	10.7		1.4	6.9	13.9		9.4	11.3	2.1		22.8	176.9	173.0	24.0	373.9
Bartholomew	119	2000	9	6	5.0	9.3	13.7		1.6	9.7	31.7		19.8	16.3	2.5		38.7	294.5	270.8	21.3	586.6
Bartholomew	119	2001	9	13	5.3	8.7	11.2		1.9	7.9	16.7		15.7	10.6	6.8		33.1	214.4	194.3	51.4	460.2
Bartholomew	119	2002	9	20	5.2	8.9	11.4		1.6	8.0	17.1		21.5	10.9	10.5		42.9	279.8	206.5	77.0	563.3
Bartholomew	119	2003	9	19	5.3	8.2	11.4		2.0	6.5	16.7		19.3	9.8	6.5		35.6	282.1	167.3	47.3	496.7
Bartholomew	119	2004	9	20	5.3	9.0	11.8		1.7	8.4	19.7		18.9	5.7	3.9		28.5	237.7	88.7	69.7	396.0
Bartholomew	119.1	1974	9	10	5.5			11.7	1.9			18.1	15.2			2.0	17.2	189.2			223.4
Bartholomew	136	1975	8	18	5.8			10.1	2.2			11.6	0.1			6.1	6.2	0.9			97.4
Bartholomew	136	1976	8	3	4.5			10.8	1.0			14.1	0.9			4.4	5.3	10.0			82.2
Bartholomew	136	1976	8	2	4.6			8.9	1.1			8.0	1.6			0.2	1.8	18.6			21.6

Appendix 2. (cont'd). Atlantic salmon mean length (cm), mean weight (g), Percent Habitat Saturation (PHS), and biomass (g per 100 m²) by site and year sampled for 1970-2004.

					Average Fork Length (cm)				Average Whole Weight (g)				Percent Habitat Saturation					Biomass (g per 100 m²)			
River	Site	Year	Month	Day	Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	All Parr	Total	Age 0	Age 1	Age 2+	Total
Bartholomew	136	1977	7	12	3.4			9.1	0.4			8.6	0.2			3.6	3.8	2.3			57.4
Bartholomew	136	1977	7	12	3.5			9.0	0.5			8.2	2.0			2.7	4.7	20.1			60.9
Bartholomew	136	1978	7	4	3.5			9.1	0.5			8.5	0.8			12.6	13.3	8.1			199.1
Bartholomew	136	1978	7	6	3.5			9.0	0.5			8.2	2.0			3.6	5.6	20.5			74.7
Bartholomew	136	1979	7	5	3.8			8.8	0.6			7.7	0.3			12.5	12.8	3.5			191.0
Bartholomew	136	1980	7	28	5.2			9.8	1.6			10.7	0.2			3.8	4.0	2.2			62.4
Bartholomew	136	1980	7	22	4.7			10.8	1.2			14.3	0.3			0.4	0.6	3.1			8.8
Bartholomew	136	1981	7	7	4.3			9.9	0.9			11.0	2.0			1.6	3.5	22.2			46.9
Bartholomew	136	1981	7	6	4.3			10.4	0.9			12.5	2.8			4.9	7.6	31.2			109.0
Bartholomew	136	1984	7	26	4.8			9.7	1.3			10.2	1.0			2.1	3.1	12.2			44.2
Bartholomew	136	1984	8	9	5.6			10.3	2.0			12.4	1.7			6.8	8.5	21.5			130.3
Bartholomew	136	1988	9	7	4.9			8.5	1.3			6.9	5.3			4.7	20.4	63.4			132.8
Bartholomew	136	1989	9	6	4.8			8.7	1.3			7.6	6.2			4.4	26.4	72.8			138.8
Bartholomew	136	1990	8	30	4.4			8.8	0.9			7.7	5.3			4.3	35.4	60.5			125.7
Bartholomew	137	1977	8	15	5.7			10.9	2.0			14.8	0.7			1.3	1.9	8.5			29.2
Bartholomew	137	1978	7	11	4.3			9.4	0.9			9.3	2.6			2.9	5.5	29.1			73.8
Bartholomew	137	1984	8	7	5.8			10.6	2.2			13.5	0.1			2.6	2.7	0.9			42.8
Bartholomew	137	1989	9	26	5.6			8.6	1.9			7.1	0.1			6.7	27.4	1.7			101.8
Bartholomew	137	1990	9	19				8.1				6.0	0.0			4.9	36.4	0.0			70.5
Bartholomew	138	1976	7	20	4.2			9.3	0.8			9.0	0.5			5.0	5.6	6.1			83.2
Bartholomew	138	1977	7	20	4.1			10.1	0.7			11.7	2.0			6.1	8.1	21.7			119.1
Bartholomew	138	1978	7	17	3.8			9.0	0.6			8.4	1.0			10.7	11.7	10.4			172.5
Bartholomew	138	1979	7	3				7.7				5.1	0.0			13.2	13.2	0.0			187.0
Bartholomew	138	1980	7	3	2.8			9.1	0.2			8.5	0.0			16.5	16.5	0.1			250.7
Bartholomew	138	1981	7	16	4.4			9.0	0.9			8.3	1.5			14.7	16.2	16.5			239.7
Bartholomew	138	1984	8	3	4.9			10.6	1.3			13.6	0.2			7.0	7.2	2.9			116.0
Bartholomew	138	1989	7	5	5.1			9.5	1.5			9.7	4.3			5.1	29.4	51.6			130.0
Bartholomew	138	1990	9	6				8.7				7.5				11.0	38.4				165.1
Bartholomew	139	1972	7	5				10.6				13.3	0.0			0.5	0.5	0.0			8.5
Bartholomew	139	1973	6	25	3.2			13.6	0.4			28.2	0.6			1.1	1.7	6.4			25.5
Bartholomew	139	1974	8	21	7.0			10.7	3.8			14.0	0.2			5.7	5.9	3.2			95.4
Bartholomew	139	1975	8	14				10.1				11.7	0.0			3.7	3.7	0.0			58.4
Bartholomew	139	1975	8	13									0.0			0.0	0.0	0.0			0.0
Bartholomew	139	1976	7	20	4.1			9.6	0.8			10.0	1.3			1.4	2.6	13.9			34.9
Bartholomew	139	1977	7	20	4.0			9.7	0.7			10.3	0.3			1.1	1.3	3.2			19.6
Bartholomew	139	1978	7	17	3.9			9.6	0.7			10.0	5.4			1.2	6.6	58.2			77.2
Bartholomew	139	1980	7	10	3.6			9.9	0.5			11.0	0.6			2.7	3.2	5.9			47.6
Bartholomew	139	1981	7	20	4.5			9.1	1.0			8.4	8.2			1.2	9.4	94.5			113.2
Bartholomew	139	1984	8	8				10.4				12.8	0.0			1.1	1.1	0.0			17.3
Bartholomew	139	1988	10	12	5.7			10.6	2.0			13.4	0.7			2.1	21.4	9.3			43.7
Bartholomew	139	1989	8	31	4.9			9.9	1.3			11.1	4.0			2.1	30.4	47.1			80.1
Bartholomew	139	1990	9	5				8.9				7.9	0.0			5.3	39.4	0.0			79.5
Bartholomew	140	1975	8	14				9.8				10.5	0.0			5.3	5.3	0.0			82.7
Bartholomew	140	1976	7	27	4.0			9.5	0.7			9.8	1.3			3.1	4.4	14.0			62.4
Bartholomew	140	1977	8	10				10.1				11.7	0.0			4.6	4.6	0.0			72.7
Bartholomew	140	1978	7	12	3.8			10.4	0.6			12.8	4.6			3.3	7.8	48.8			101.2

Appendix 2. (cont'd). Atlantic salmon mean length (cm), mean weight (g), Percent Habitat Saturation (PHS), and biomass (g per 100 m^2) by site and year sampled for 1970-2004.

River	Site	Year	Month	Day	Average Fork Length (cm)				Average Whole Weight (g)				Percent Habitat Saturation					Biomass (g per 100 m^2)			
					Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	All Parr	Total	Age 0	Age 1	Age 2+	Total
Bartholomew	140	1980	7	10				11.2				16.1	0.0			3.4	3.4	0.0			56.2
Bartholomew	140	1981	7	20	4.5			9.8	1.0			10.5	2.1			5.7	7.8	24.2			112.8
Bartholomew	140	1984	8	8				14.0				30.9	0.0			4.0	4.0	0.0			72.8
Bartholomew	140	1988	9	20				8.3				6.5	0.0			0.3	22.4	0.0			3.9
Bartholomew	140	1989	8	31	6.3				2.8				0.1			0.0	31.4	1.3			1.3
Bartholomew	140	1990	8	8				9.3				9.1	0.0			0.2	40.4	0.0			3.7
Bartholomew	141	1971	8	25									0.0			0.0	0.0	0.0			0.0
Bartholomew	141	1974	8	30				10.2				12.0	0.0			25.8	25.8	0.0			410.0
Bartholomew	141	1975	8	13				10.4				12.7	0.0			9.4	9.4	0.0			149.9
Bartholomew	141	1976	7	6				9.1				8.4	0.0			13.4	13.4	0.0			203.4
Bartholomew	141	1977	7	19	4.0			10.1	0.7			11.6	2.7			10.8	13.5	29.9			200.7
Bartholomew	141	1978	7	12	3.4			8.4	0.4			6.6	4.1			18.0	22.2	41.7			307.0
Bartholomew	141	1979	7	4				7.6				4.9	0.0			11.6	11.6	0.0			163.9
Bartholomew	141	1980	7	2	3.5			9.5	0.5			9.6	0.1			23.1	23.2	1.3			357.7
Bartholomew	141	1981	7	16	4.3			9.2	0.9			8.8	4.6			10.9	15.6	52.2			219.0
Bartholomew	141	1984	8	2	4.9			11.0	1.3			14.9	0.1			7.8	7.9	1.6			128.4
Bartholomew	141	1988	8	24	5.1			9.4	1.5			9.3	2.7			10.6	23.4	32.0			195.4
Bartholomew	141	1989	9	5	5.1			9.1	1.5			8.5	9.0			10.2	32.4	108.4			263.2
Bartholomew	141	1990	7	31				8.4				6.8	0.0			7.7	41.4	0.0			113.5
Bartholomew	142	1976	9	10				11.3				16.3	0.0			1.1	1.1	0.0			17.6
Bartholomew	142	1977	8	4				10.9				14.8	0.0			1.3	1.3	0.0			20.7
Bartholomew	142	1978	7	18	3.9			9.6	0.7			10.1	1.2			27.9	29.	12.7			446.7
Bartholomew	142	1980	7	15				11.2				15.8	0.0			3.7	3.7	0.0			61.7
Bartholomew	142	1984	8	7	4.3			9.7	0.9			10.5	0.0			2.2	2.2	0.4			34.1
Bartholomew	142	1988	8	18				9.6				9.9	0.0			0.8	24.	0.0			11.6
Bartholomew	142	1989	8	29				10.8				14.3	0.0			1.1	33.	0.0			18.2
Bartholomew	142	1990	8	23				13.8				29.7	0.0			1.3	42.	0.0			23.5
Bartholomew	164	1970	7	28				11.1				15.5	0.0			10.4	10.	0.0			170.8
Bartholomew	165	1970	7	30	4.9			11.1	1.3			15.4	0.2			2.0	2.	1.8			34.7
Bartholomew	165	1971	7	27	4.2			12.1	0.8			19.8	0.2			0.7	0.	1.7			14.0
Bartholomew	165	1972	7	10	3.9				0.7				0.0			0.0	0.	0.5			0.5
Bartholomew	165	1973	7	4	3.7			10.6	0.6			13.6	0.4			0.8	1.	4.3			17.6
Bartholomew	165	1974	8	21	5.9			11.8	2.3			18.4	2.9			3.5	6.	37.2			95.5
Bartholomew	165	1975	8	17	5.3				1.7				0.0			0.0	0.	0.4			0.4
Bartholomew	165	1976	8	1	4.6				1.1				1.0			0.0	1.	11.2			11.2
Bartholomew	165	1977	7	21	4.1			9.3	0.8			9.1	1.2			0.2	1.	13.3			16.0
Bartholomew	165	1978	7	13	3.8			7.8	0.6			5.4	1.2			0.3	1.	12.8			16.6
Bartholomew	165	1984	8	1	5.1			9.9	1.5			11.0	0.1			1.1	1.	1.2			17.7
Bartholomew	166	1975	8	11	4.9			9.1	1.3			8.4	14.3			16.4	30.	169.7			419.0
Bartholomew	166	1976	7	30	4.6			9.2	1.1			8.9	6.7			12.3	19.	78.3			265.9
Bartholomew	167	1975	8	18				10.3				12.4	0.0			0.3	0.	0.0			5.3
Bartholomew	167	1976	7	23	4.3			10.6	0.9			13.3	1.8			1.9	3.	20.3			50.3
Bartholomew	167	1977	7	4	2.7			8.6	0.2			7.2	0.0			1.9	2.	0.3			29.2
Bartholomew	167	1978	7	10	4.0			9.3	0.7			9.2	1.2			9.1	10	13.3			152.5
Bartholomew	167	1979	7	9	4.3			8.8	0.9			7.7	0.0			6.4	6.	0.3			96.7
Bartholomew	167	1980	7	9	3.8			10.4	0.6			12.8	2.3			3.9	6.	24.4			87.1

Appendix 2. (cont'd). Atlantic salmon mean length (cm), mean weight (g), Percent Habitat Saturation (PHS), and biomass (g per 100 m²) by site and year sampled for 1970-2004.

					Average Fork Length (cm)				Average Whole Weight (g)				Percent Habitat Saturation					Biomass (g per 100 m²)			
River	Site	Year	Month	Day	Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	All Parr	Total	Age 0	Age 1	Age 2+	Total
Bartholomew	167	1981	7	10	4.3			10.3	0.9			12.4	3.8			2.9	6.8	43.1			90.1
Bartholomew	167	1984	7	30	5.4			9.4	1.8			9.5	0.8			1.8	2.6	9.7			37.7
Bartholomew	168	1976	7	12	3.8			9.3	0.6			9.1	0.7			0.7	1.4	7.2			18.4
Bartholomew	168	1977	8	4	4.8			10.0	1.2			11.4	3.6			2.7	6.3	42.0			85.2
Bartholomew	168	1978	7	11	3.8			9.0	0.6			8.2	4.0			2.3	6.3	42.8			77.4
Bartholomew	168	1979	7	9	3.8			7.7	0.6			5.1	1.6			3.8	5.4	17.2			71.4
Bartholomew	168	1980	7	22	4.8				1.2				0.0			0.0	0.0	0.4			0.4
Bartholomew	168	1981	7	13	4.3			8.8	0.9			7.7	1.3			0.2	1.5	14.3			17.5
Cains	74	1972	8	31	5.6	7.6	11.1	9.1	2.0	4.9	15.4	8.5	4.5	16.9	17.3		38.7	56.2	239.7	284.2	580.1
Cains	74	1973	8	24	4.6		12.3	12.3	1.1		21.1	21.1	2.5	0.0	0.7		3.1	28.6	0.0	11.2	39.8
Cains	74	1974	8	29	5.3	9.5		9.5	1.7	9.6		9.4	8.9	8.2	0.0		17.0	108.9	126.0	0.0	234.9
Cains	74	1975	7	24	3.9	8.3	11.3	8.5	0.7	6.5	16.3	7.0	2.9	1.1	0.2		4.2	31.4	16.4	3.2	51.0
Cains	74	1976	9	10	6.6	9.6		9.3	3.2	10.0		9.0	7.6	6.6	0.0		14.2	101.9	101.8	0.0	203.7
Cains	74	1977	8	26	5.2	9.3		9.3	1.6	9.1		9.0	5.1	6.8	0.0		12.0	62.8	104.6	0.0	167.4
Cains	74	1978	8	24	5.1	9.7	12.4	10.1	1.5	10.3	21.8	11.8	4.4	7.1	2.7		14.1	52.7	111.2	45.7	209.6
Cains	74	1979	9	3	6.2	9.2	11.9	9.8	2.7	8.7	19.0	10.8	8.3	6.4	3.7		18.4	109.2	96.9	63.0	269.1
Cains	74	1980	9	8	6.3	9.7	12.4	9.9	2.8	10.4	21.5	11.0	6.7	4.6	2.4		13.7	88.6	71.8	40.6	201.0
Cains	74	1981	9	17	5.9	10.0	12.1	9.9	2.3	11.4	19.9	11.0	15.4	2.5	2.8		20.8	197.1	40.2	47.8	285.1
Cains	74	1982	8	12	5.3	8.5	10.2	9.8	1.7	6.9	12.0	10.7	3.4	0.6	3.7		7.7	41.5	9.6	58.6	109.6
Cains	74	1983	8	23	5.5	10.0	11.5	10.1	1.9	11.2	17.1	11.6	20.5	6.3	0.9		27.7	256.0	98.9	15.6	370.6
Cains	74	1984	8	1	4.5	9.6		9.6	1.0	9.9		9.9	1.7	1.5	0.0		3.2	19.7	23.1	0.0	42.8
Cains	74	1985	8	8	4.8	8.9	10.8	9.6	1.3	8.0	14.3	10.1	13.6	2.6	2.5		18.7	160.2	39.3	41.1	240.6
Cains	74	1986	9	3	5.6	9.5	11.1	9.9	2.0	9.8	15.6	11.0	19.1	10.0	4.3		33.3	240.5	154.2	70.2	464.9
Cains	74	1987	7	23	4.5	8.5	11.8	8.7	1.0	7.0	18.6	7.4	8.1	6.1	0.7		14.9	92.7	90.2	11.7	194.6
Cains	74	1988	7	21	3.8	8.4	11.3	8.5	0.6	6.6	16.3	6.8	14.5	4.4	0.3		19.2	155.3	65.4	4.6	225.3
Cains	74	1989	7	20	4.1	7.3	11.8	7.4	0.8	4.4	18.6	4.6	2.1	4.7	0.4		7.2	23.1	65.0	7.4	95.6
Cains	74	1990	7	20	3.7	7.6	10.8	8.2	0.6	5.0	14.3	6.1	6.1	2.6	1.3		10.0	64.7	36.6	20.7	122.0
Cains	74	1992	7	20	3.8	8.3	11.8	8.5	0.6	6.6	18.6	6.9	7.0	20.2	2.1		29.2	74.9	296.3	34.6	405.9
Cains	74	1993	8	9	4.4	8.0		8.0	1.0	5.8		6.0	8.7	5.6	0.0		14.3	98.7	81.0	0.0	179.7
Cains	74	1994	8	3	4.4	7.5	11.0	7.9	1.0	4.8	15.1	5.5	12.9	16.6	4.9		34.4	147.5	233.5	80.6	461.6
Cains	74	1995	8	28	5.0	8.1	10.9	8.6	1.4	6.0	14.5	7.2	20.3	11.1	5.7		37.1	242.2	161.2	92.9	496.2
Cains	74	1996	9	13	5.2	9.1	12.1	9.7	1.6	8.6	20.2	10.5	24.3	11.2	11.8		47.3	302.9	211.5	87.8	602.1
Cains	74	1997	9	12	5.1	8.2	11.7	8.4	1.5	6.3	17.9	6.6	20.9	7.2	0.6		28.6	253.2	104.9	9.7	367.8
Cains	74	1998	7	31	4.6	8.1	11.2		1.1	6.1	15.8		16.4	21.6	11.9		49.9	189.2	314.7	196.0	699.9
Cains	74	1999	8	24	5.2	8.6	10.8		1.6	7.1	14.1		20.6	22.5	6.7		49.8	250.9	334.0	109.3	694.2
Cains	74	2000	8	16	5.3	8.7	11.0		2.0	8.0	16.7		27.5	8.1	6.7		42.3	398.3	131.0	120.9	650.1
Cains	74	2001	8	28	5.3	8.4	10.6		1.7	6.7	13.6		17.0	22.2	4.6		43.7	208.4	326.9	73.9	609.2
Cains	74	2002	8	29	5.1	8.8	11.5		1.7	7.9	17.4		27.4	25.7	12.2		65.2	358.5	391.3	206.3	956.1
Cains	74	2003	9	17	5.5	8.6	11.3		2.0	7.7	17.0		12.8	13.5	1.7		28.0	168.1	212.9	29.9	410.9
Cains	74	2004	9	27	6.1	9.5	12.6		2.6	9.9	22.5		24.0	19.3	7.9		51.2	316.6	300.0	135.0	751.6
Cains	75	1971	9	1	5.5	10.8		9.1	1.8	14.3		8.4	1.8	0.2	0.0		2.1	22.9	4.0	0.0	26.9
Cains	75	1972	8	29	5.8	10.3		10.3	2.2	12.4		12.4	1.7	1.1	0.0		2.7	21.0	17.3	0.0	38.3
Cains	75	1973	8	30	4.4	10.6		10.6	1.0	13.3		13.3	0.6	0.6	0.0		1.2	6.4	9.5	0.0	15.9
Cains	75	1974	8	20	4.9	9.8	12.3	10.1	1.4	10.8	21.1	11.5	6.3	2.6	0.4		9.3	74.7	41.0	7.3	122.9
Cains	75	1975	8	18	4.9	8.4	10.1	9.0	1.4	6.6	11.5	8.2	5.3	1.7	1.5		8.5	62.7	24.7	24.4	111.8
Cains	75	1976	8	24	5.4	9.0		9.0	1.8	8.2		8.2	3.9	1.0	0.0		4.8	47.7	14.7	0.0	62.4

Appendix 2. (cont'd). Atlantic salmon mean length (cm), mean weight (g), Percent Habitat Saturation (PHS), and biomass (g per 100 m²) by site and year sampled for 1970-2004.

					Average Fork Length (cm)				Average Whole Weight (g)				Percent Habitat Saturation					Biomass (g per 100 m²)			
River	Site	Year	Month	Day	Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	All Parr	Total	Age 0	Age 1	Age 2+	Total
Cains	75	1977	8	12	4.3	8.8	10.8	9.8	0.9	7.7	14.3	10.6	5.3	0.4	0.7		6.4	60.2	6.1	11.3	77.6
Cains	75	1978	8	9	3.6		9.9	9.9	0.5		10.9	10.9	1.1	0.0	1.6		2.7	11.2	0.0	25.5	36.7
Cains	75	1979	8	21	4.9				1.3				1.8	0.0	0.0		1.8	21.4	0.0	0.0	21.4
Cains	75	1980	9	10	5.7				2.1				1.4	0.0	0.0		1.4	17.7	0.0	0.0	17.7
Cains	75	1981	7	28	4.1				0.7				1.0	0.0	0.0		1.0	10.8	0.0	0.0	10.8
Cains	75	1982	9	21	6.4		11.8	11.8	3.0		18.6	18.6	2.5	0.0	0.4		2.9	33.3	0.0	7.0	40.4
Cains	75	1983	9	1	5.5	9.1		9.1	1.9	8.6		8.6	5.0	0.6	0.0		5.7	62.6	9.5	0.0	72.1
Cains	75	1984	8	27	5.1	9.4		9.4	1.5	9.4		8.0	2.1	2.4	0.0		4.5	25.7	36.6	0.0	62.3
Cains	75	1985	8	14	4.6				1.1				4.7	0.0	0.0		4.7	54.7	0.0	0.0	54.7
Cains	75	1986	9	2	5.4				1.7				3.8	0.0	0.0		3.8	46.3	0.0	0.0	46.3
Cains	75	1987	7	20	4.2	8.3		8.3	0.8	6.5		6.5	4.9	0.5	0.0		5.4	55.2	6.9	0.0	62.0
Cains	75	1988	7	18	3.7	8.7	11.1	9.5	0.6	7.4	15.3	9.6	3.5	1.5	1.4		6.5	37.5	22.7	23.4	83.5
Cains	75	1989	7	17	3.7	6.5		6.5	0.6	3.1		3.1	1.4	0.6	0.0		2.0	14.8	8.2	0.0	23.0
Cains	75	1990	7	10	3.4	7.5		7.5	0.4	4.7		4.7	2.5	1.9	0.0		4.4	25.9	26.5	0.0	52.4
Cains	75	1993	8	4	3.9	9.4	12.3	8.2	0.7	9.4	21.1	6.2	3.0	6.1	1.0		10.1	32.6	93.6	17.4	143.6
Cains	75	1996	9	12	4.7		10.2		1.1		12.0		6.6	0.0	4.1		10.7	75.0	0.0	24.4	99.5
Cains	75	1997	9	12	4.8	7.4		7.4	1.2	4.5		4.5	9.0	5.8	0.0		14.8	104.0	75.8	0.0	179.9
Cains	75	1999	9	2	4.6	8.9	11.7		1.1	8.1	18.1		10.3	21.9	2.5		34.6	128.0	114.8	32.6	275.4
Cains	75	2000	8	4	4.7				1.4				8.5	0.0	0.0		8.5	121.4	0.0	0.0	121.4
Cains	75	2001	9	10	5.2	8.0			1.6	5.8			4.2	6.5	0.0		10.7	49.3	88.1	0.0	137.4
Cains	75	2002	9	20	4.9	8.0			1.3	5.0			7.0	1.9	0.0		8.9	78.6	19.8	0.0	98.4
Cains	75	2003	9	19	5.4	8.6			1.8	7.2			4.7	3.3	0.0		8.0	56.6	43.3	0.0	99.9
Cains	75	2004	9	13	5.1				1.5				4.3	0.0	0.0		4.3	51.6	0.0	0.0	51.6
Cains	76	1971	8	19	4.1	9.8	12.3	11.1	0.8	10.6	21.1	15.6	0.5	1.0	1.8		3.3	5.1	15.6	30.8	51.5
Cains	76	1972	8	17	5.6	9.3	11.3	11.2	1.9	9.1	16.1	15.9	1.4	0.3	1.8		3.4	17.7	4.2	29.0	50.9
Cains	76	1973	8	20	4.7	8.8	10.3	9.8	1.2	7.7	12.4	10.6	1.2	0.3	0.8		2.2	13.9	3.9	12.5	30.2
Cains	76	1974	8	21	4.6	10.4		10.4	1.1	12.6		12.6	2.0	3.6	0.0		5.5	22.8	57.3	0.0	80.1
Cains	76	1975	8	15	4.5	9.0	11.4	10.3	1.0	8.2	16.6	12.5	2.9	1.7	4.1		8.6	32.9	24.9	67.7	125.5
Cains	76	1976	8	24	5.6	8.7	11.6	10.4	2.0	7.4	17.4	12.7	2.4	1.9	1.7		6.0	30.8	28.1	27.9	86.8
Cains	76	1977	8	11	4.5	9.8		9.8	1.0	10.6		10.6	3.6	0.9	0.0		4.5	41.4	13.7	0.0	55.1
Cains	76	1978	8	8	3.3	8.4	9.9	9.2	0.4	6.8	11.0	8.9	0.5	0.8	1.4		2.7	4.9	11.2	22.6	38.7
Cains	76	1979	8	20	4.8	7.8	9.1	8.6	1.2	5.4	8.4	7.3	1.2	0.2	0.6		2.0	13.8	2.9	8.9	25.5
Cains	76	1981	9	18	6.1		11.6	11.6	2.6		17.4	17.4	6.6	0.0	2.3		8.9	86.3	0.0	38.7	125.0
Cains	76	1982	9	21	6.1	9.3	11.8	11.0	2.5	9.1	18.6	14.9	2.6	1.1	4.0		7.6	33.6	16.3	66.7	116.6
Cains	76	1983	7	15	4.5	8.8		8.8	1.1	7.7		7.7	2.5	0.2	0.0		2.6	28.3	2.8	0.0	31.1
Cains	76	1984	8	2	4.4		10.4	10.4	1.0		12.7	12.7	2.4	0.0	1.6		3.9	27.0	0.0	25.1	52.1
Cains	76	1985	8	29	5.5	9.2	11.2	9.5	1.9	8.7	16.1	9.8	10.9	1.9	3.7		16.5	135.9	28.9	61.0	225.8
Cains	76	1993	9	8	4.8	8.4		8.4	1.2	6.7		6.7	3.2	4.5	0.0		7.7	35.0	59.6	0.0	94.5
Cains	76	1994	8	3	4.3	6.6			0.9	3.3			6.0	3.4	0.0		9.4	66.5	41.6	0.0	108.1
Cains	76	1997	9	11	4.7	8.1		8.1	1.2	5.9		5.9	10.0	4.7	0.0		14.7	116.2	61.8	0.0	178.0
Cains	77	1971	8	11	5.1	10.4	12.8	11.2	1.5	12.5	23.7	15.8	1.8	2.4	2.1		6.2	21.4	37.8	35.7	94.9
Cains	77	1972	8	16	5.6	9.7	11.3	10.4	2.0	10.3	15.5	12.6	0.8	4.4	4.7		10.0	9.8	69.1	78.5	157.4
Cains	77	1973	9	12	5.8	10.5	11.8	10.7	2.3	13.1	18.6	13.9	6.8	1.2	0.3		8.4	87.3	19.3	5.5	112.1
Cains	77	1974	9	9	5.9	10.1	12.0	10.8	2.3	11.6	19.6	14.3	6.6	10.7	3.1		20.4	85.0	168.8	53.2	307.0
Cains	77	1975	8	6	4.3	8.7	11.9	9.2	0.9	7.6	18.9	8.7	4.1	6.3	2.2		12.6	46.0	93.9	37.4	177.3
Cains	77	1976	9	13	5.5	8.5	11.3	9.4	1.9	7.0	16.1	9.5	3.7	8.2	9.3		21.3	46.1	121.8	154.3	322.3

Appendix 2. (cont'd). Atlantic salmon mean length (cm), mean weight (g), Percent Habitat Saturation (PHS), and biomass (g per 100 m²) by site and year sampled for 1970-2004.

					Average Fork Length (cm)				Average Whole Weight (g)				Percent Habitat Saturation					Biomass (g per 100 m²)			
River	Site	Year	Month	Day	Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	All Parr	Total	Age 0	Age 1	Age 2+	Total
Cains	77	1977	8	4	4.7	8.9	12.2	10.4	1.2	8.1	20.4	12.7	8.5	2.8	5.2		16.5	98.8	42.2	88.8	229.8
Cains	77	1978	8	8	4.1	8.9	10.9	9.2	0.7	8.1	14.8	8.8	6.1	7.0	2.6		15.6	67.3	105.1	41.9	214.4
Cains	77	1979	9	4	5.5	8.4	11.0	10.2	1.8	6.6	14.9	11.9	3.5	0.8	3.8		8.1	43.0	12.2	62.6	117.8
Cains	77	1980	8	14	5.7	9.5	12.3	10.2	2.1	9.6	21.1	11.9	2.7	0.5	0.3		3.5	34.5	7.4	5.4	47.4
Cains	77	1981	8	31	6.2	9.4	11.4	10.4	2.7	9.5	16.9	12.9	9.7	2.4	4.0		16.0	126.3	37.2	66.1	229.6
Cains	77	1982	9	22	5.7	9.6	11.9	11.3	2.1	10.1	18.9	16.4	4.5	2.0	10.8		17.3	56.7	31.4	183.0	271.2
Cains	77	1983	8	26	5.7	9.6		9.6	2.0	10.1		10.1	9.7	7.6	0.0		17.3	122.3	118.6	0.0	240.9
Cains	77	1984	9	20	5.2	10.1		10.1	1.6	11.6		10.9	2.6	4.6	0.0		7.2	31.9	72.0	0.0	104.0
Cains	77	1985	7	29	5.0	9.1	10.8	9.6	1.4	8.6	14.3	9.9	7.8	2.5	1.3		11.6	93.6	37.6	21.4	152.6
Cains	77	1986	7	25	3.6	9.5	11.5	10.1	0.5	9.6	17.3	11.7	3.4	8.9	7.2		19.6	35.4	137.7	120.9	293.9
Cains	77	1987	7	22	4.6	8.8	10.8	9.0	1.1	7.8	14.3	8.3	16.1	11.2	2.0		29.2	186.7	167.6	33.0	387.3
Cains	77	1988	7	11	3.9	8.4	12.3	8.5	0.7	6.6	21.1	7.0	9.7	2.1	0.6		12.4	104.7	31.2	10.0	145.9
Cains	77	1989	7	11	3.7	7.2		7.2	0.6	4.3		4.3	8.8	7.8	0.0		16.6	92.9	108.6	0.0	201.5
Cains	77	1990	7	11	3.6	7.5	10.8	7.9	0.5	4.7	14.3	5.6	14.1	2.7	1.1		17.9	147.7	37.8	17.7	203.1
Cains	77	1992	7	30	4 2	8.2		8.2	0.8	6.3		6.3	13.6	2.6	0.0		16.3	151.5	38.4	0.0	189.9
Cains	77	1993	8	10	4.6	7.9		7.9	1.1	5.6		5.6	9.9	5.6	0.0		15.5	114.6	80.7	0.0	195.4
Cains	77	1994	8	15	5.4	8.4	11.6	8.7	1.7	6.8	17.4	7.5	10.7	10.2	3.2		24.2	132.2	150.9	54.0	337.2
Cains	77	1995	8	29	5.2	8.9	11.7	9.1	1.6	7.9	18.0	8.4	12.5	18.0	3.3		33.8	152.5	270.5	55.8	478.7
Cains	77	1996	9	12	6.0	9.0	11.2	9.7	2.4	8.2	15.9	10.4	16.4	5.6	1.1		23.1	208.0	81.1	7.6	296.6
Cains	77	1997	9	11	5.9	8.5		8.5	2.3	6.8		6.8	3.3	4.4	0.0		7.7	38.6	57.6	0.0	96.2
Cains	77	1998	8	24	5.5	8.1	10.8		1.9	6.0	14.3		7.7	8.3	2.5		18.5	91.8	124.1	17.5	233.4
Cains	77	1999	9	2	4.8	8.3	10.8		1.3	6.4	14.3		23.6	25.1	5.6		54.3	140.0	272.4	14.6	426.9
Cains	77	2000	8	3	4.9	8.9	12.2		1.5	8.3	21.0		8.2	10.0	6.2		24.4	107.7	174.0	46.8	328.5
Cains	77	2001	9	10	5.0	8.0	9.6		1.4	5.9	13.6		3.6	10.1	4.8		18.6	41.2	171.7	44.9	257.9
Cains	77	2002	9	13	5.8	8.7	11.3		2.3	7.5	16.5		11.4	15.2	14.3		40.8	150.5	289.9	106.1	546.5
Cains	77	2003	9	16	5.7	8.8	11.4		2.1	8.0	18.0		2.8	8.9	1.8		13.5	32.7	139.9	13.4	185.9
Cains	77	2004	9	13	5.7	9.8	11.7		2.1	10.1	16.6		11.5	7.6	9.1		28.1	143.4	113.5	140.2	397.2
Cains	78	1971	8	16	4.7	9.9	12.8	9.9	1.2	11.1	23.7	11.1	4.8	2.6	0.0		7.4	56.3	40.5	0.0	96.8
Cains	78	1993	9	8	5.8	8.9	11.8	9.7	2.2	8.1	18.4	10.3	4.4	11.0	6.4		21.8	51.4	184.9	46.5	282.8
Cains	78	1994	8	24	4.7	8.3		8.3	1.2	6.6		6.6	10.5	12.3	0.0		22.8	121.6	175.5	0.0	297.1
Cains	78	1996	9	12	4.9	8.1		8.1	1.3	6.0		6.0	9.8	3.7	0.0		13.5	115.2	71.9		187.1
Cains	78	1997	9	17	4.8	7.6	10.5	8.0	1.2	5.0	13.1	5.8	5.0	6.1	2.0		13.1	55.9	88.0	13.7	157.5
Cains	78	1998	8	24	5.0	8.1			1.4	5.9			6.1	3.7	0.0		9.8	69.8	47.3	0.0	117.0
Cains	78	1999	9	2	4.6	7.9	11.2		1.1	5.6	15.9		13.4	16.7	9.2		39.3	251.0	347.7	46.3	645.0
Cains	78	2000	8	3	4.5	7.8			1.1	5.6			8.2	6.1	0.0		14.3	105.1	85.5	0.0	190.6
Cains	78	2001	9	10	5.0	8.2	11.0		1.4	6.6	17.0		8.3	12.0	5.8		26.1	99.8	207.9	46.9	354.6
Cains	78	2002	9	13	4.9	8.7	11.4		1.4	7.2	17.2		16.8	8.2	6.2		31.2	213.3	135.8	45.5	394.5
Cains	78	2003	9	16	4.9	8.7			1.4	8.2			2.8	4.6	0.0		7.4	32.3	68.5	0.0	100.8
Cains	78	2004	9	13	5.0	8.5	11.4		1.4	6.9	15.8		11.4	8.7	14.3		34.3	135.6	126.3	225.9	487.8
Cains	110	1994	8	2	4.3	7.4	11.2	7.9	0.9	4.8	14.7	5.9	17.5	17.1	6.5		41.1	195.6	270.4	45.1	511.1
Cains	110	1997	8	26	5.0	7.8	11.1	8.2	1.4	5.4	15.6	6.2	22.4	27.3	8.2		57.9	275.0	437.5	62.8	775.3
Cains	174	1997	9	11		9.6		9.6		9.9		9.9	0.0	7.2	0.0		7.2	0.0	100.4	0.0	100.4
Cains	178	1997	8	29	5.1	8.2	10.7	8.5	1.5	8.3	13.9	7.0	3.8	17.7	5.0		26.5	43.0	280.8	36.6	360.4
Cains	198	1998	8	24		9.4	11.5			9.4	17.2		0.0	3.8	6.4		10.2	0.0	82.4	43.6	125.9
Cains	202	2000	8	4	4.6	8.4	11.1		1.3	7.0	15.5		5.3	6.6	2.3		14.2	72.7	102.7	15.6	191.0
Cains	211	1997	9	16			10.3	10.3			12.4	12.4	0.0	0.0	9.0		9.0	0.0	0.0	58.3	58.3

Appendix 2. (cont'd). Atlantic salmon mean length (cm), mean weight (g), Percent Habitat Saturation (PHS), and biomass (g per 100 m²) by site and year sampled for 1970-2004.

					Average Fork Length (cm)				Average Whole Weight (g)				Percent Habitat Saturation					Biomass (g per 100 m²)			
River	Site	Year	Month	Day	Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	All Parr	Total	Age 0	Age 1	Age 2+	Total
Cains	212	2001	8	16		8.4				7.0			0.0	8.2	0.0		8.2	0.0	117.5	0.0	117.5
Cains	212	2002	9	18	5.6	8.6	12.2		1.9	6.9	20.8		8.2	3.7	6.2		18.1	93.8	67.0	43.8	204.6
Cains	212	2003	9	19	6.4	8.5	10.8		3.0	7.0	15.4		1.8	2.7	5.1		9.7	21.4	58.2	37.0	116.5
Cains	212	2004	9	23	5.9	9.7	12.2		2.2	9.6	21.6		5.2	8.2	3.8		17.2	63.1	120.1	67.7	251.0
Cains	213	2002	8	29	5.0	9.3	11.7		1.5	8.8	17.0		10.7	3.9	3.5		18.1	138.5	65.2	22.1	225.8
Cains	213	2004	9	29	5.7	9.8	11.6		2.1	10.5	17.0		11.8	9.3	7.4		28.5	151.5	146.2	118.3	416.0
Taxis	86	1972	7	25	4.8	9.3	12.4	10.0	1.2	9.0	21.6	11.3	0.1	3.7	2.4		6.2	1.4	57.4	40.4	99.2
Taxis	86	1973	8	20	5.6	9.5	12.1	11.3	2.0	9.7	19.9	16.1	1.1	1.6	6.4		9.1	13.5	24.8	108.5	146.8
Taxis	86	1974	7	31	4.4	9.9	12.9	10.4	1.0	11.0	24.3	12.9	3.4	4.1	1.8		9.3	39.2	64.4	30.9	134.5
Taxis	86	1975	7	31	4.1	7.8	11.5	8.3	0.8	5.3	17.2	6.4	1.8	7.4	2.9		12.1	20.2	105.4	48.6	174.2
Taxis	86	1976	9	1	5.6	8.3	11.3	9.3	1.9	6.4	16.2	9.0	4.5	6.6	8.3		19.4	56.2	96.9	137.7	290.8
Taxis	86	1977	8	9	4.6	8.3	11.2	8.9	1.1	6.4	16.1	8.0	3.2	6.9	4.3		14.4	37.0	101.7	70.9	209.6
Taxis	86	1978	8	22	3.6	7.2	10.8	7.6	0.5	4.1	14.1	5.0	0.7	6.4	2.8		9.9	6.9	88.3	45.6	140.8
Taxis	86	1980	8	28	6.3	9.6	12.0	10.1	2.8	10.1	19.6	11.8	4.3	4.8	2.3		11.3	56.1	74.2	38.7	169.0
Taxis	86	1981	9	3	4.9	9.0	12.3	9.0	1.4	8.1	21.1	8.3	5.9	6.6	0.6		13.1	69.9	100.1	10.4	180.4
Taxis	86	1982	9	14	5.7	8.4	12.2	8.6	2.0	6.6	20.4	7.3	0.7	4.4	0.9		5.9	8.3	64.5	15.3	88.1
Taxis	86	1983	8	25	5.3	8.6	10.9	9.8	1.7	7.3	14.7	10.6	2.2	2.4	4.7		9.4	27.3	36.4	76.6	140.2
Taxis	86	1984	8	7	4.9	8.6	10.6	9.2	1.3	7.3	13.5	8.8	1.3	2.9	1.1		5.3	15.5	43.3	17.5	76.3
Taxis	86	1993	9	2	4.6	7.9	10.7	8.7	1.1	5.7	13.9	7.4	4.1	7.9	4.9		16.9	44.5	127.0	34.5	206.0
Taxis	86	1994	8	18	4.7	7.4	9.9	7.8	1.2	4.6	11.0	5.4	5.4	12.3	5.3		23.0	60.8	192.5	37.3	290.6
Taxis	86	1995	8	31	3.9	7.3	10.5	8.2	0.7	4.4	13.1	6.2	3.3	13.7	12.9		30.0	34.7	235.8	94.7	365.2
Taxis	86	1996	9	11	5.0	8.3	11.5	8.6	1.4	6.5	17.2	7.3	12.8	9.5	1.4		23.7	152.0	137.7	9.9	299.6
Taxis	86	1997	9	24	4.5	7.5	11.0	7.9	1.0	4.8	15.1	5.7	7.3	18.4	6.0		31.7	81.4	283.7	45.2	410.3
Taxis	86	1998	9	16	4.8	7.4	10.6		1.2	4.6	13.3		3.4	4.5	5.7		13.6	37.6	76.6	39.1	153.3
Taxis	86	1999	9	13	4.2	7.3	10.2		0.9	4.4	12.0		6.0	13.6	13.2		32.9	48.2	339.1	114.8	502.0
Taxis	86	2000	9	11	5.1	7.9	10.9		1.5	4.9	14.5		9.9	3.7	11.6		25.3	120.5	79.9	81.2	281.6
Taxis	86	2001	8	30	3.9	7.7	11.0		0.7	5.0	14.4		4.6	13.3	1.4		19.4	49.6	185.4	9.7	244.8
Taxis	86	2002	9	27	5.1	8.1	11.3		1.4	6.3	14.9		4.9	5.7	2.4		13.0	53.1	88.7	15.5	157.4
Taxis	86	2003	9	22	5.5	8.1	10.0		1.8	5.7	10.5		8.0	12.4	3.4		23.8	92.9	185.2	22.1	300.1
Taxis	86	2004	9	24	5.3	8.4	11.7		1.5	6.1	17.0		6.2	9.2	24.0		39.4	70.8	124.4	381.3	576.5
Taxis	87	1972	8	3	4.7	9.0	12.2	9.7	1.2	8.2	20.4	10.5	0.8	7.4	5.3		13.5	9.5	112.3	89.9	211.7
Taxis	87	1973	9	6	6.3	9.5	11.7	10.6	2.8	9.7	18.1	13.6	0.9	2.0	3.7		6.7	12.4	30.9	62.2	105.5
Taxis	87	1974	7	24	4.1	8.9	13.1	9.5	0.8	7.9	25.2	9.6	2.1	1.9	0.9		4.9	23.4	29.3	15.1	67.8
Taxis	87	1975	8	19	4.4	7.4	11.2	7.8	1.0	4.6	15.9	5.4	6.5	10.8	3.0		20.3	74.4	151.7	49.4	275.5
Taxis	87	1976	9	1	6.4	8.8	11.7	9.7	2.9	7.8	18.2	10.2	11.4	13.5	12.3		37.2	150.9	203.3	205.8	560.0
Taxis	87	1977	8	16	4.5	8.7	11.4	9.3	1.0	7.5	16.6	9.0	5.3	12.4	6.3		24.0	61.5	186.0	103.8	351.2
Taxis	87	1978	8	15	4.0	7.0	10.3	7.2	0.7	3.9	12.4	4.2	0.7	5.6	0.7		7.0	7.4	76.5	11.8	95.7
Taxis	87	1979	9	5	5.6	8.1	10.9	9.1	2.0	6.1	14.5	8.4	2.1	3.2	3.5		8.8	26.0	46.7	57.3	129.9
Taxis	87	1993	9	9	4.8	8.4	11.0	8.9	1.2	6.6	15.1	8.0	15.4	17.3	7.1		39.8	183.3	283.7	52.2	519.2
Taxis	88	1972	7	24	4.3	9.0	11.9	9.3	0.9	8.1	19.2	9.1	0.2	5.7	1.5		7.4	2.6	85.7	25.3	113.7
Taxis	88	1973	9	6	6.0	9.6	11.6	10.8	2.5	9.9	17.8	14.1	7.1	2.5	5.6		15.3	91.8	38.6	94.6	225.0
Taxis	88	1974	7	24	3.2	9.1	12.6	9.3	0.4	8.6	22.4	9.1	2.5	17.9	1.9		22.2	24.6	272.1	32.8	329.5
Taxis	88	1975	7	21	3.7	7.4	11.0	8.3	0.6	4.5	14.9	6.4	2.3	11.5	8.7		22.5	24.6	160.8	141.5	327.0
Taxis	88	1976	9	4	5.8	8.2	11.5	8.7	2.2	6.2	17.3	7.3	10.3	14.7	11.3		36.3	131.2	215.1	188.3	534.6
Taxis	88	1977	8	4	4.0	8.2	10.2	8.6	0.7	6.2	12.1	7.3	6.2	10.5	5.9		22.6	67.9	153.2	93.6	314.7
Taxis	88	1978	8	15	5.2	8.0	11.2	8.5	1.6	5.8	15.9	6.9	4.2	14.9	5.1		24.3	51.5	215.7	84.6	351.7

Appendix 2. (cont'd). Atlantic salmon mean length (cm), mean weight (g), Percent Habitat Saturation (PHS), and biomass (g per 100 m²) by site and year sampled for 1970-2004.

					Average Fork Length (cm)				Average Whole Weight (g)				Percent Habitat Saturation					Biomass (g per 100 m²)			
River	Site	Year	Month	Day	Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	Parr	Age 0	Age 1	Age 2+	All Parr	Total	Age 0	Age 1	Age 2+	Total
Taxis	88	1979	9	20	5.8	8.0	10.5	8.9	2.2	5.8	13.0	7.9	4.1	3.1	3.3		10.4	51.5	44.1	52.2	147.8
Taxis	88	1980	8	20	5.6	8.5	11.0	8.8	1.9	6.8	14.9	7.6	4.4	6.8	1.8		13.0	55.3	99.9	29.7	184.9
Taxis	88	1981	8	4	4.7	8.0	11.0	8.4	1.2	5.7	14.9	6.8	5.3	6.0	2.7		14.0	61.8	86.8	44.0	192.7
Taxis	88	1982	8	30	5.3	8.1	11.9	8.5	1.6	6.0	19.1	7.0	1.9	13.4	4.5		19.8	22.7	194.8	76.4	293.8
Taxis	88	1983	8	30	5.9	8.9	11.0	9.5	2.3	7.9	15.2	9.7	1.7	8.0	6.0		15.7	22.3	120.6	97.9	240.8
Taxis	88	1984	7	19	3.9	8.2	10.0	8.7	0.7	6.2	11.2	7.4	0.8	3.6	2.3		6.7	8.1	53.1	35.7	96.9
Taxis	88	1985	7	30	5.2	9.5	11.8	10.0	1.6	9.7	18.8	11.1	4.0	12.6	5.3		21.9	49.0	194.6	88.5	332.1
Taxis	88	1986	8	5	4.4	8.8	11.8	10.1	1.0	7.6	18.5	11.6	4.0	4.4	7.3		15.6	45.1	65.7	122.5	233.3
Taxis	88	1993	9	9	5.0	8.1	11.2	9.4	1.4	6.0	15.8	9.4	10.8	15.1	19.9		45.8	127.7	294.6	149.5	571.8
Taxis	88	1994	8	26	5.0	7.7	10.9	8.8	1.4	5.1	14.5	7.7	11.3	20.9	27.5		59.7	133.7	406.8	209.6	750.1
Taxis	88	1997	9	18	5.4	8.0	10.7	8.8	1.7	5.9	13.7	7.6	9.3	25.5	10.6		45.4	110.9	427.3	79.7	617.9
Taxis	88	1998	9	16	5.3	7.9	10.6		1.7	5.6	13.4		8.6	13.2	19.2		40.9	101.8	265.9	141.0	508.7
Taxis	88	1999	9	1	5.0	7.9	10.8		1.4	5.6	14.4		17.8	19.2	5.3		42.2	107.6	302.4	116.0	526.0
Taxis	88	2000	9	21	5.1	8.4	10.9		1.4	6.7	14.0		15.2	17.9	15.0		48.2	180.4	335.8	105.1	621.3
Taxis	88	2001	8	30	4.9	7.5	11.3		1.3	4.9	15.0		6.6	19.1	7.6		33.3	74.5	303.9	51.9	430.3
Taxis	88	2002	9	27	4.9	7.8	10.9		1.3	5.1	14.3		9.2	11.1	9.3		29.6	106.3	180.7	65.7	352.7
Taxis	88	2003	9	22	5.4	7.9	11.3		1.8	5.7	16.1		5.1	15.9	7.3		28.3	61.2	257.5	53.7	372.4
Taxis	88	2004	9	24	5.7	8.8	11.0		2.0	7.3	14.3		6.7	14.5	8.8		30.0	81.3	208.9	136.7	426.9
Taxis	192	1998	9	17	5.0	10.5			1.4	13.1			15.4	12.7	0.0		28.1	186.0	188.6	0.0	374.6
Taxis	193	1998	9	18	5.4	10.1			1.7	11.8			9.0	19.0	0.0		28.0	107.7	288.9	0.0	396.6
Taxis	194	1998	9	18	5.6	9.2	13.8		2.0	8.8	29.7		3.2	17.6	3.4		24.2	37.2	272.8	26.6	336.6
Taxis	195	1998	9	17	4.8	7.7	10.2		1.3	5.2	11.9		7.8	5.7	5.8		19.4	90.4	99.1	39.7	229.2
Taxis	195	2000	10	13	5.0	7.9	11.5		1.4	5.5	16.9		8.7	10.9	13.7		33.3	102.2	194.2	99.1	395.4
Taxis	195	2001	8	30	4.2	7.7	11.1		0.8	5.0	14.5		5.2	20.4	8.7		34.3	56.3	319.0	60.6	435.9
Taxis	195	2002	9	18	5.1	8.1	11.4		1.4	5.6	15.9		8.1	9.9	8.5		26.5	91.9	156.0	58.7	306.6
Taxis	195	2004	9	24	5.4	8.7	12.3		1.8	6.9	19.7		7.7	13.3	7.4		28.4	95.8	182.4	119.5	397.7
Taxis	196	1998	9	17	5.0	7.5	10.9		1.4	4.7	14.5		11.0	12.9	8.2		32.2	130.4	207.1	60.5	398.0
Taxis	197	1998	9	17	4.6	7.5			1.1	4.8			11.4	5.5	0.0		16.9	132.1	72.2	0.0	204.4